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SENSING STUDY: 2 AND 4 MAY 1972 (NASA)
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SEA REMOTE SENSING PROGRAM

MISSISSIPPI SOUND REMOTE SENSING STUDY MAY 2 & 4, 1972

PART I SURFACE MEASUREMENTS



MANNED SPACECRAFT CENTER

MISSISSIPPI SOUND IV REMOTE SENSING STUDY
PRINCIPAL INVESTIGATOR - Dr. B. H. Atwell

PARTICIPANTS

Alabama Department of Conservation
General Electric
Gulf Coast Research Laboratory
Gulf Universities Research Consortium
Lockheed Electronics Company
Louisiana Wildlife and Fisheries
Mississippi Marine Conservation Commission
Mississippi State University
National Aeronautics and Space Administration
 Earth Resources Laboratory
 Mississippi Test Facility
National Marine Fisheries Service
NOVA University
Tulane University
University of Alabama, Marine Science Institute
U. S. Food and Drug Administration
U. S. Corps of Engineers - Mobile, Alabama
U. S. Corps of Engineers - New Orleans, Louisiana

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INTRODUCTION

As a part of the remote sensing program of the NASA Earth Resources Laboratory, a study of the Mississippi Sound was initiated in early 1971. The data acquisition phase of this study was planned to be framed about overflights by NASA aircraft equipped with instrumentation designed for the acquisition of remotely sensed data. Presented in this report are the surface data collected in support of the fourth flight in this series. The previous flights took place on July 22, 1971; November 10, 1971; and January 26, 1972. A report similar to the one presented here was prepared for each of these previous flights. This volume is a companion to these earlier reports providing the same information at a later point in time. There are, however, included in this report some additional data which were not part of earlier reports. There were two reasons for this: (1) Remotely sensed data were collected at night as well as day during this experiment. Surface measurements made in support of this night flight are included. (2) Because of cloudy weather on the day the mission was planned, the high altitude data (17,500') were not collected until two days later. Additional surface measurements were made at this time.

A brief description of the conduction of this mission including the times for flight lines follows: The mission was originally planned for May 2 and the surface measurement vessels were deployed in the early morning of this day. However, by the time the sun angle had become high enough for good photography the cloud cover had become too great to collect remotely sensed data. In hopes that the weather would improve, the aircraft remained airborne and the boats were held on their stations. The cloud cover by 1100 (CDT) had not improved to the extent to allow the high altitude data to be collected. It was decided, therefore, to collect data over the low altitude flight lines. These lines were flown at the following times:

Date May 2, 1972

Line No.	Beginning Time (CDT)	End Time (CDT)
10	11:28	11:44
11	12:04	12:11
12	12:15	12:33
13	12:37	12:41

<u>Line No.</u>	<u>Beginning Time (CDT)</u>	<u>End Time (CDT)</u>
14	12:53	13:28
15	13:45	14:12
16	14:20	14:30
17	14:31	14:41

Unfavorable weather conditions and problems involved in trying to field more boats for surface measurements resulted in no Mississippi Sound flights planned for May 3, 1972. Flights were planned for May 4, both day and evening, and surface measurements made in support of these flights are listed in Tables 4-11. The weather was good and the lines were flown at the following times:

<u>Line No.</u>	<u>Beginning Time (CDT)</u>	<u>End Time (CDT)</u>
1	08:30	08:52
2	08:56	09:18
3	09:24	09:42
4	09:46	10:04
5	10:08	10:26
6	10:30	10:40
7	10:43	10:53
8	10:56	11:06
9	11:09	11:19
1	19:02	19:26
2	19:28	19:52
4	19:57	20:17
21	20:29	20:17
22	20:34	20:40
23	20:44	20:50
24	20:52	20:57

The surface measurements were made and water samples collected by personnel from the list of participants shown on the cover page. These agencies made available both personnel and equipment to take part in this study. The water chemistry was performed by personnel of the General Electric Company under contract to MTF. Salinity and chlorophyll measurements were made by Lockheed Electronics Company personnel, support contractor to the Earth Resources Laboratory. Jerry Brashier, William L. Beacht and James Halbach of Lockheed Electronics Company compiled this report from data furnished by participants. The contour maps were done by G.K. Stuckey and Ernst W. Zwart.

MATERIALS AND METHODS

Field Procedures

One hundred and twenty-seven stations were planned for this mission.¹ However, for various reasons twenty-one stations were not covered.

Surface water temperature measurements were made at fifteen minute intervals and at flyover by taking bucket samples and immediately immersing a mercury bulb thermometer in the center of the bucket.

Air temperature measurements were taken with mercury bulb thermometers as near the water surface as possible on the shady side of the boat. These measurements were taken at thirty minute intervals and at flyover.

Psychrometer, water transparency, water current, wind direction and speed, and sea state measurements and observations were made at hourly intervals and flyover.

Relative humidity values were obtained with sling psychrometers.

¹ Mississippi Sound IV Flight Line and Station Map located in rear pocket.

Water transparency was determined with secchi disks. Wind direction, wind speed, sea state, and position of aircraft in relation to the station were in most cases estimated.

Field salinities were determined at station "sixty-seven" with a battery operated Beckman Model RS5-3 in-situ salinometer. Conductivity and temperature measurements were made by the instrument and combined in a computer circuit to provide a readout in salinity with an accuracy of ± 0.3 o/oo.

Surface current velocity and direction were measured at selected stations. Conventional impellar type current meters were used at a few of these stations. At the other stations a neutrally buoyant float with minimum freeboard (partially filled plastic bottle) was attached to a 75 foot cord. The time required for the float to reach the end of the cord after being dropped from the boat was measured. Knowing the length of the cord and the elapsed time a velocity was computed. An azimuth was determined with the aid of a compass.

MATERIALS AND METHODS

Field Procedures Cont'd.

Station "sixty-seven" was a special station where field measurements and water samples were taken at the surface and at various depths beginning at 1800 C.D.T. May 1 and continuing through 1532 C.D.T. May 2, 1972.

Meteorological data taken during the mission are represented by Tables 1-2 and Figures 1-6.

Tide measurements recorded by the U. S. Corps of Engineers-Mobile, Alabama and New Orleans, Louisiana are shown in Figures 7-10.

Located in the pocket on the rear cover are surface salinity, surface water temperature, and surface chlorophyll contour maps. Also included are flight line and station map and current vector map for Mississippi Sound IV.

MATERIALS AND METHODS

Laboratory Procedures

Water samples were taken in pint polypropylene bottles for chlorophyll and salinity analyses. The remaining analyses were performed on samples taken in glass bottles because of possible absorption by polypropylene. Numbers were marked on the bottles for identification. Plastic buckets (2 1/2 gallons) were used in collecting surface samples. Depth samples were obtained at station "sixty-seven" with a "Jabsco Water Puppy". All samples were kept cool and dark in styrofoam ice chests and delivered to Mississippi Test Facility. Those requiring refrigeration were refrigerated until time of analysis.

Salinities were run with a Beckman Model RS-7B Induction Salinometer. Standard (35 o/oo) sea water was used as a reference, and salinities were determined from the conductivity ratio of the sample to that of the standard. Temperature and instrument drift corrections were made according to the Beckman manual.

The technique used for determination of chlorophyll, which gives a measure of the phytoplankton present, was essentially that proposed by SCOR-UNESCO working group 17 in Determination of Photosynthetic Pigments in Sea-Water, UNESCO, Paris 1969.

Each water sample for chlorophyll analysis was filtered through a millipore 0.45 micron acetate filter. The filters and their residue were stored at -15°C over activated silica gel. Each filter and its residue were ground in a teflon tissue grinder. Ninety percent acetone was used as the extracting agent. The acetone homogenates were stored in the dark for ten minutes, then centrifuged at 2000 g for approximately one hour instead of the recommended ten minutes because the extract was too turbid. The volume of each extract was recorded and the absorption spectrum of the chlorophyll extract measured against a blank acetate filter dissolved in 90% acetone. The measurements were made on a Cary 17 Spectrophotometer.

The absorption spectra were indexed at 750, 663, 645 and 630 m μ . The absorption at 663, 645, and 630 m μ was corrected by comparison with the absorption of the "reference blank" at 750 m μ . These corrected values are used in the following formula to determine chlorophyll A.

$$\text{chl A} = (11.64 \times e_{663} - 2.16 \times e_{645} + 0.10 \times e_{630}) \times \frac{\text{ext (ml)}}{\text{vol (l)}} \times \frac{1}{\text{absorption cell light path (cm)}}$$

MATERIALS AND METHODS

Laboratory Procedures (cont'd)

where e_{663} = absorption at 663 m μ

e_{645} = absorption at 645 m μ

e_{630} = absorption at 630 m μ

ext = extract volume

vol = volume of sample

Scientists from General Electric (MTF) ran the following analyses.

Light transmission measurements were made using a Beckman D-BG spectrophotometer with a 10 mm width sample cell at a wavelength of 625 millimicrons.

Turbidity measurements were conducted on a Coleman nephocolorimeter.

The pH determinations were made using a Beckman expandomatic pH meter.

Phosphates were determined by using the stannous chloride method for orthophosphate as described in Standard Methods for the Examination of Water and Wastewater, 12th. Edition, page 234. Instead of 100 ml samples, a 50 ml sample was used, therefore cutting all reagents by one half.

The nitrates were determined using the brucine method of analysis as described in Standard Methods for the Examination of Water and Wastewater, 12th. Edition, page 198.

In determining suspended solids, tared no. 42 Whatman filter papers were placed on a millipore vacuum filter unit. While under vacuum, 100 mls of sample was filtered and flushed with an equal amount of distilled water. The filters were dried in an oven at 220-225° f., placed in a dessicator and weighed.

Chloride ion and salinity were determined using the method described in Standard Methods for the Examination of Water and Wastewater, 12th. Edition, page 86. From the filtered sample a five ml aliquot was titrated with standarized silver nitrate and the indicating agent was potassium chromate. Salinity was calculated from the chlorinity according to the Encyclopedia of Oceanography, 1st. Edition, page 72.

Potassium was determined by a volumetric procedure using sodium tetraphenylboron. A 25 ml aliquot of the sample was used for analysis. Method of Analysis of the Association of Official Agricultural Chemists, 10th. Edition, page 23, described the method.

MATERIALS AND METHODS

Laboratory Procedures (Cont'd)

Sodium was determined by a gravimetric procedure described in Standard Methods for the Examination of Water and Wastewater, 12th. Edition, page 277.

Iron, magnesium and calcium were determined using atomic absorption spectrophotometry.

Most of the data computations and listings for this mission were made with the Univac 1108. Due to lack of space the laboratory measurements were abbreviated. Below is a nomenclature list.

<u>Column</u>	<u>Abbreviation</u>	<u>Name</u>
1	Sta num	Station number
2	Time CDT	Time Central Daylight
3	Samp Dpth Ft	Sample depth feet
4	Salin PTS/K	Salinity parts per thousand
5	Salin PTS/K	Salinity parts per thousand
6	Lght tran perc	Light transmission o/o
7	Turb neph unit	Turbidity nephlo units
8	pH unit	pH
9	CL PTS/K	Chloride ion parts per thousand
10	NA PTS/K	Sodium milligrams per liter
11	K MG/L	Potassium milligrams per liter
12	PO ₄ MG/L	Phosphate milligrams per liter
13	NO ₃ MN/L	Milligrams nitrogen per liter
14	MG MG/L	Magnesium milligrams per liter
15	FE MG/L	Iron milligrams per liter
16	CA MG/L	Calcium milligrams per liter
17	Susp sold MG/L	Suspended solids milligrams per liter
18	Total solid MG/L	Total solids milligrams per liter
19	Chlo pH A M/M ³	Chlorophyll A milligrams per cubic meter

TUESDAY, 2 May 1972

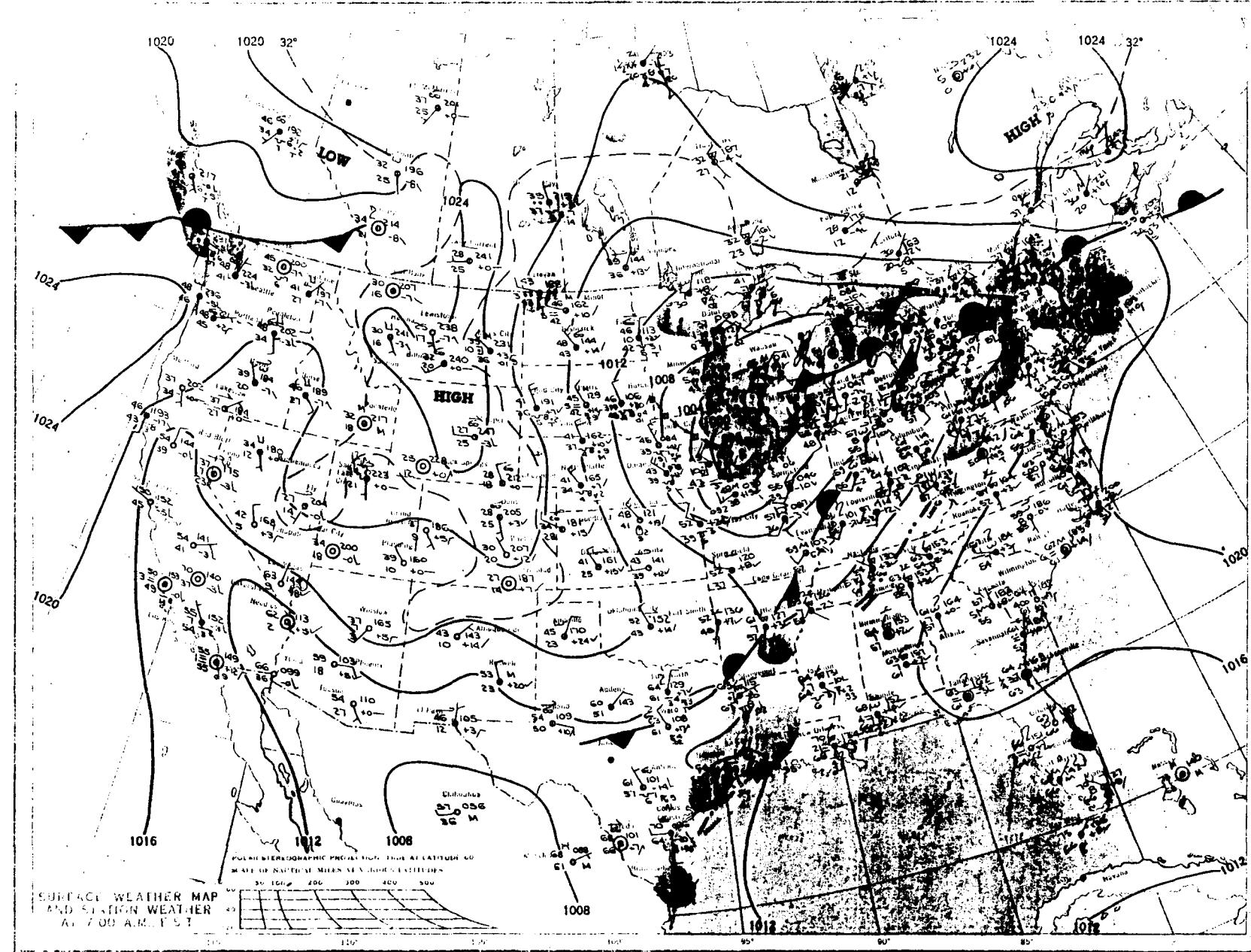


FIGURE 1.

SURFACE WEATHER MAP AND STATION WEATHER
AT 0700 A.M. E.S.T.

<u>Pressure</u>	<u>Temp.</u>	<u>Dew Point</u>	<u>Height</u>
<u>Millibars</u>	<u>Centigrade</u>		<u>Meters</u>
1013.0	25.8	17.2	0
998.0	23.3	13.4	130
978.8	21.7	11.3	299
964.0	20.5	9.6	432
949.8	19.0	10.8	559
929.0	16.9	12.4	750
921.4	16.6	10.1	819
918.0	16.5	9.0	851
911.0	16.1	11.3	916
888.7	14.7	6.6	1126
877.0	14.0	4.1	1239
857.6	13.2	2.1	1426
835.0	12.2	-.3	1652
828.6	11.9	-1.0	1716
799.8	10.4	-4.2	2011
772.0	8.9	-7.5	2305
744.5	6.8	-7.8	2603
729.0	5.6	-8.0	2777
717.6	4.7	-10.5	2905
715.0	4.4	-11.1	2935
692.9	4.3	-11.8	3190
681.0	4.3	-12.2	3332

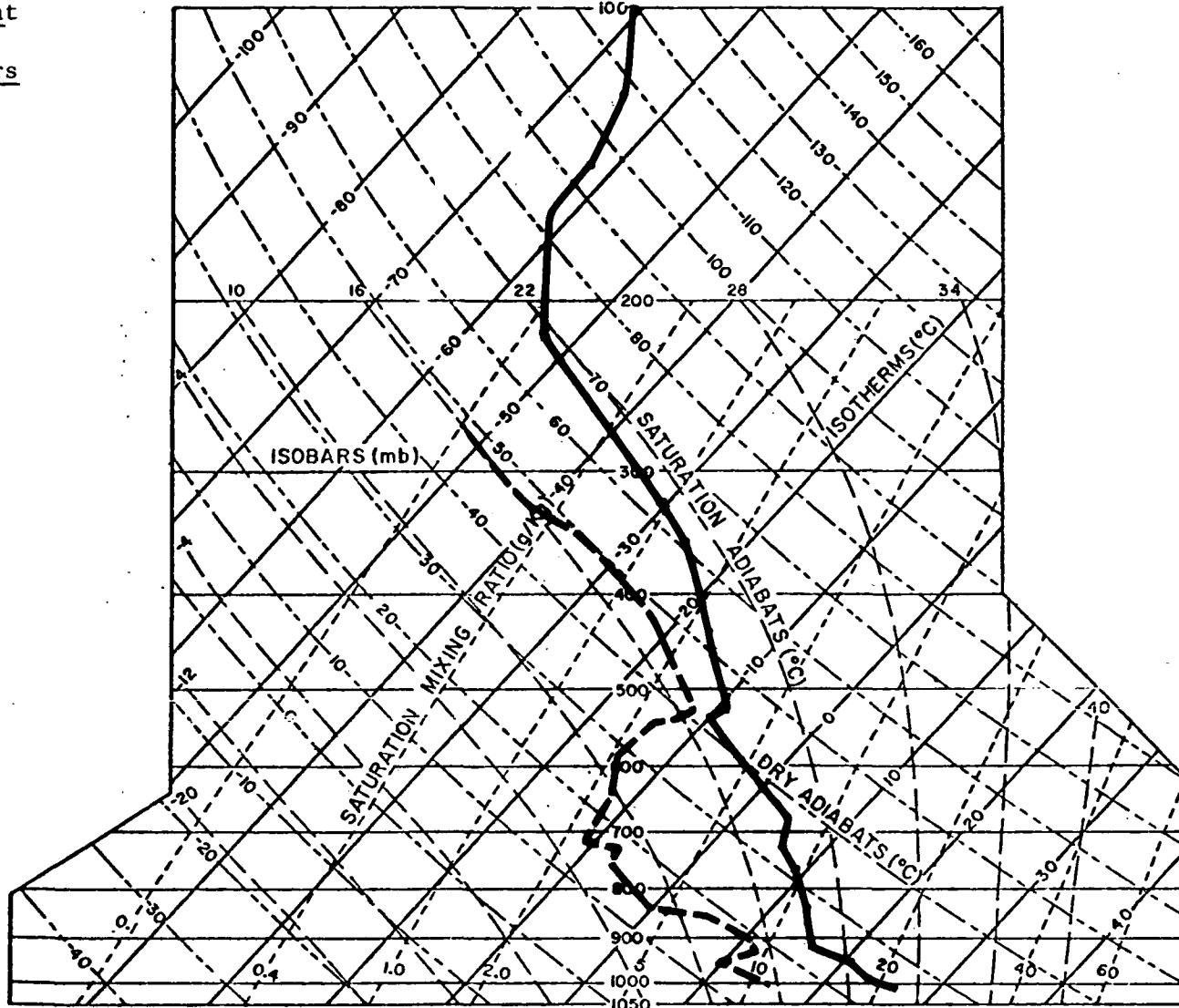


FIGURE 2.

Machine processed radiosonde data available from
Mississippi Test Facility 1545 GMT, 2 May 1972

<u>Pressure</u>	<u>Temp.</u>	<u>Dew Point</u>	<u>Height</u>
<u>Millibars</u>	<u>Centigrade</u>		<u>Meters</u>
1014.0	24.8	19.9	0
980.5	21.2	18.6	293
968.0	19.9	18.1	405
948.3	18.8	12.1	581
940.0	18.3	9.5	658
921.0	17.1	13.9	833
899.0	16.0	3.9	1039
891.5	15.7	2.5	1109
862.5	14.6	-2.6	1389
834.4	13.5	-7.8	1668
823.0	13.0	-10.0	1785
807.2	12.1	-10.8	1945
780.9	10.5	-12.0	2220
755.5	8.9	-13.3	2494
730.9	7.4	-14.6	2769
715.0	6.3	-15.5	2952
706.7	5.7	-15.3	3047
682.5	3.8	-14.8	3331

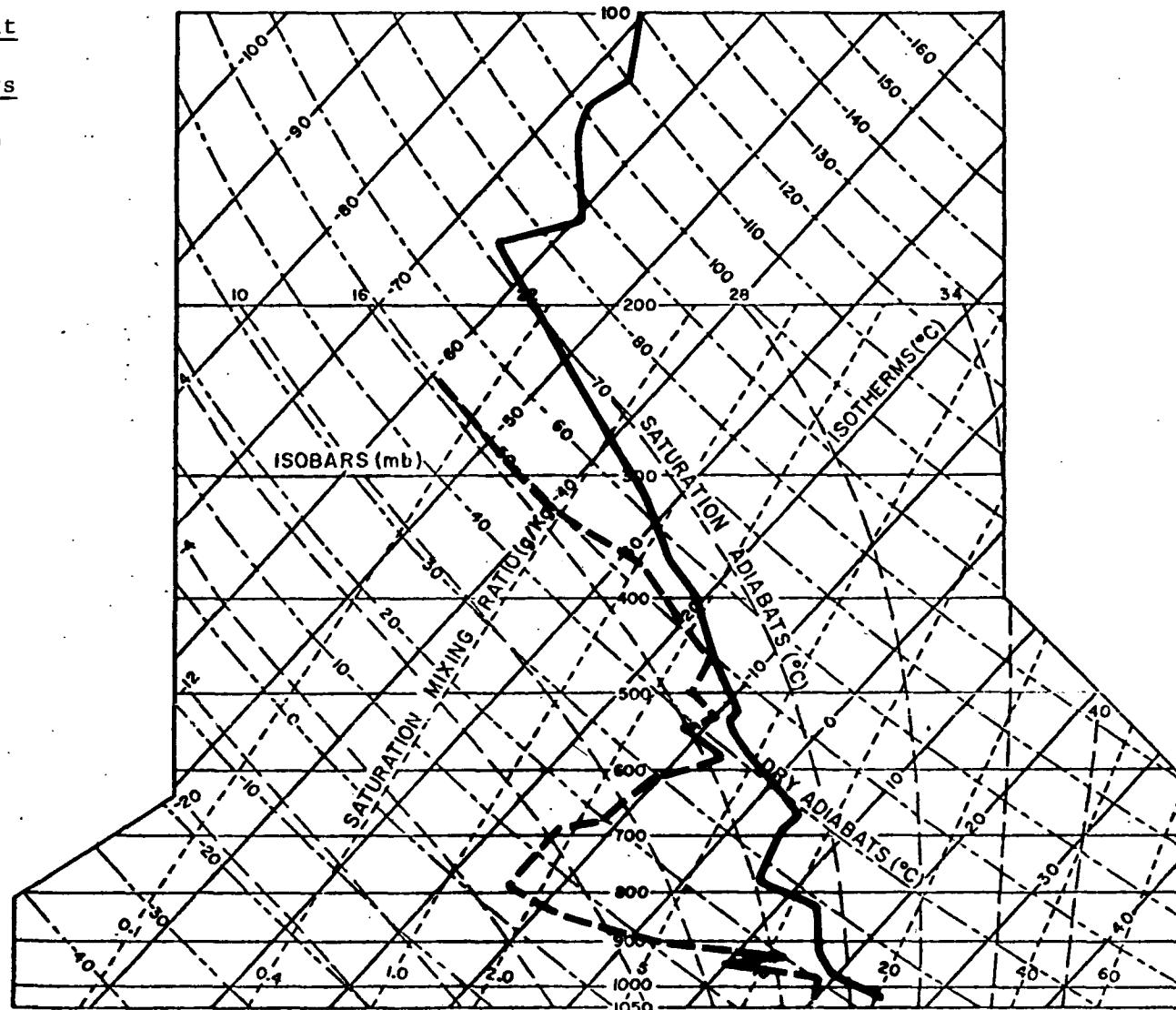


FIGURE 3. Machine processed radiosonde data available from Bootheville, Louisiana 1630 GMT, 2 May 1972

TABLE 1
 NATIONAL WEATHER SERVICE
 SURFACE METEOROLOGICAL OBSERVATIONS
 2 MAY 1972 1300 C.D.T.- 1500 C.D.T.

<u>TIME</u> <u>C.D.T.</u>	<u>STATION</u>	<u>PRESSURE</u> <u>MB</u>	<u>TEMPERATURE</u>		<u>DEW POINT</u>		<u>R.H.</u> <u>%</u>	<u>WIND</u> <u>DIRECTION</u>	<u>KNOTS</u>
			<u>F.</u>	<u>C.</u>	<u>F.</u>	<u>C.</u>			
1300	Pensacola, Fla.	1014.6	77	25.0	67	19.4	71.3	170	10
	N.O. Audubon-Park	1005.8	76	24.4	66	18.9	71.2	135	6
	Biloxi, Miss.	1014.9	79	26.1	67	19.4	66.8	180	6
	Valpariso, Fla.	1012.5	76	24.4	68	20.0	76.3	180	8
	Mobile, Ala.	1012.5	82	27.8	61	16.1	49.1	210	11
1400	Pensacola, Fla.	1014.6	76	24.4	68	20.0	76.3	200	8
	N. O. Audubon-Park	1005.8	76	24.4	69	20.6	79.0	135	6
	Biloxi, Miss.	--	79	26.1	67	19.4	66.8	160	8
	Valpariso, Fla.	1012.5	75	23.9	69	20.6	81.6	200	10
	Mobile, Ala.	1012.5	79	26.1	63	17.2	58.1	170	10
1500	Pensacola, Fla.	1013.9	78	25.6	67	19.4	69.0	210	10
	N.O. Audubon-Park	1005.8	75	23.9	69	20.6	81.6	135	6
	Biloxi, Miss.	--	78	25.6	68	20.0	71.4	170	8
	Valpariso, Fla.	1012.5	75	23.9	69	20.6	81.6	190	9
	Mobile, Ala.	1012.5	78	25.6	64	17.8	62.1	170	9

THURSDAY, 4 May 1972

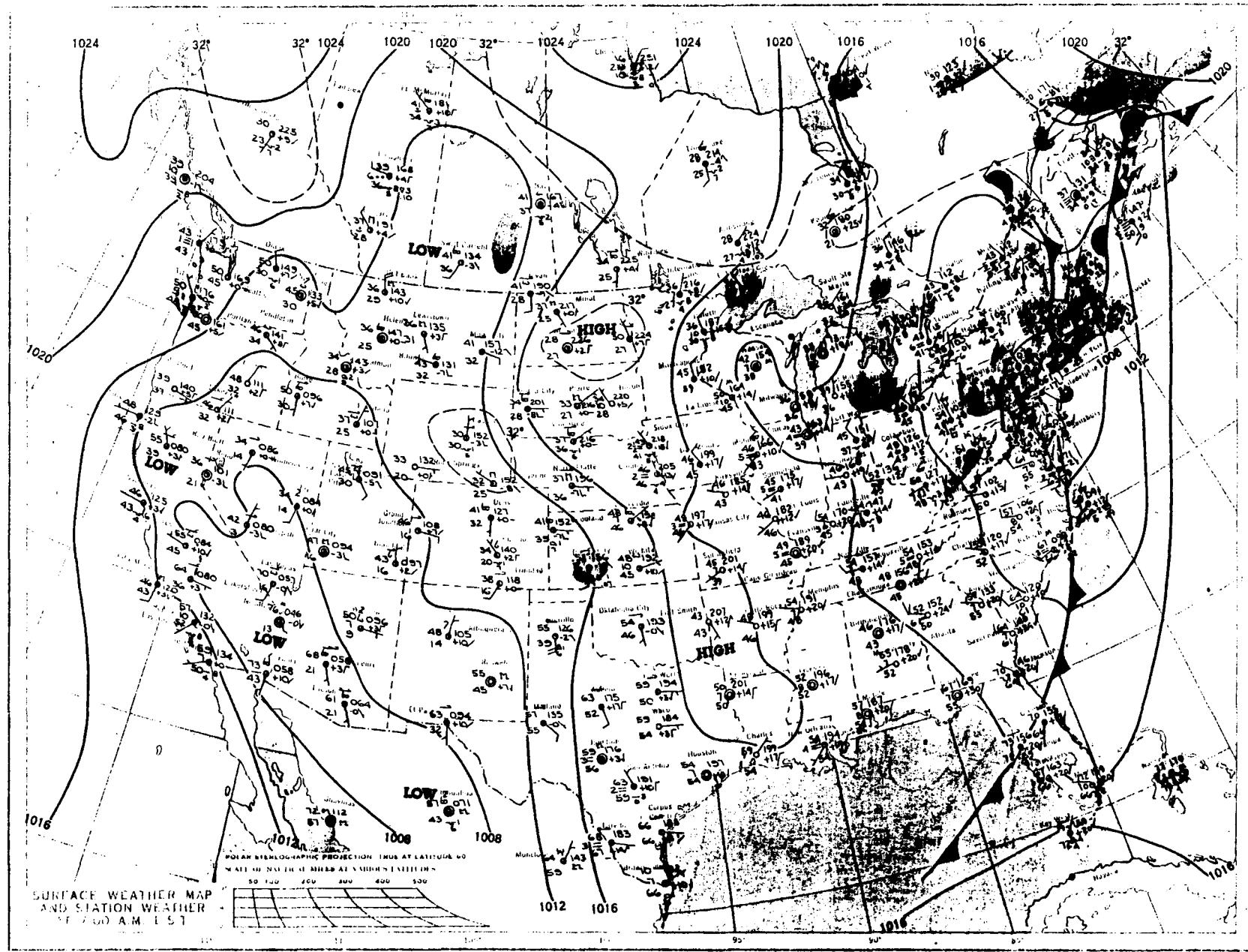


FIGURE 4.

SURFACE WEATHER MAP AND STATION WEATHER
AT 0700 A.M. E.S.T.

<u>Pressure</u>	<u>Temp.</u>	<u>Dew Point</u>	<u>Height</u>
<u>Millibars</u>	<u>Centigrade</u>		<u>Meters</u>
1020.0	22.0	11.7	0
986.1	18.3	8.1	290
962.0	15.6	5.5	502
954.3	15.1	4.9	570
926.0	13.3	2.8	823
905.0	11.9	1.2	1017
898.8	11.4	1.0	1074
872.9	8.9	-.1	1317
870.0	8.7	-.2	1346
847.7	7.4	-3.9	1559
842.0	7.1	-4.8	1616
826.0	8.5	-8.5	1774
822.6	8.4	-8.8	1807
798.3	8.0	-10.8	2055
788.0	7.8	-11.7	2162
775.8	7.8	-11.7	2290
772.0	7.8	-11.7	2332
752.3	6.3	-13.1	2541
729.0	4.5	-14.8	2798
706.4	2.8	-16.5	3055
687.0	1.2	-18.0	3281
684.3	1.2	-18.1	3312

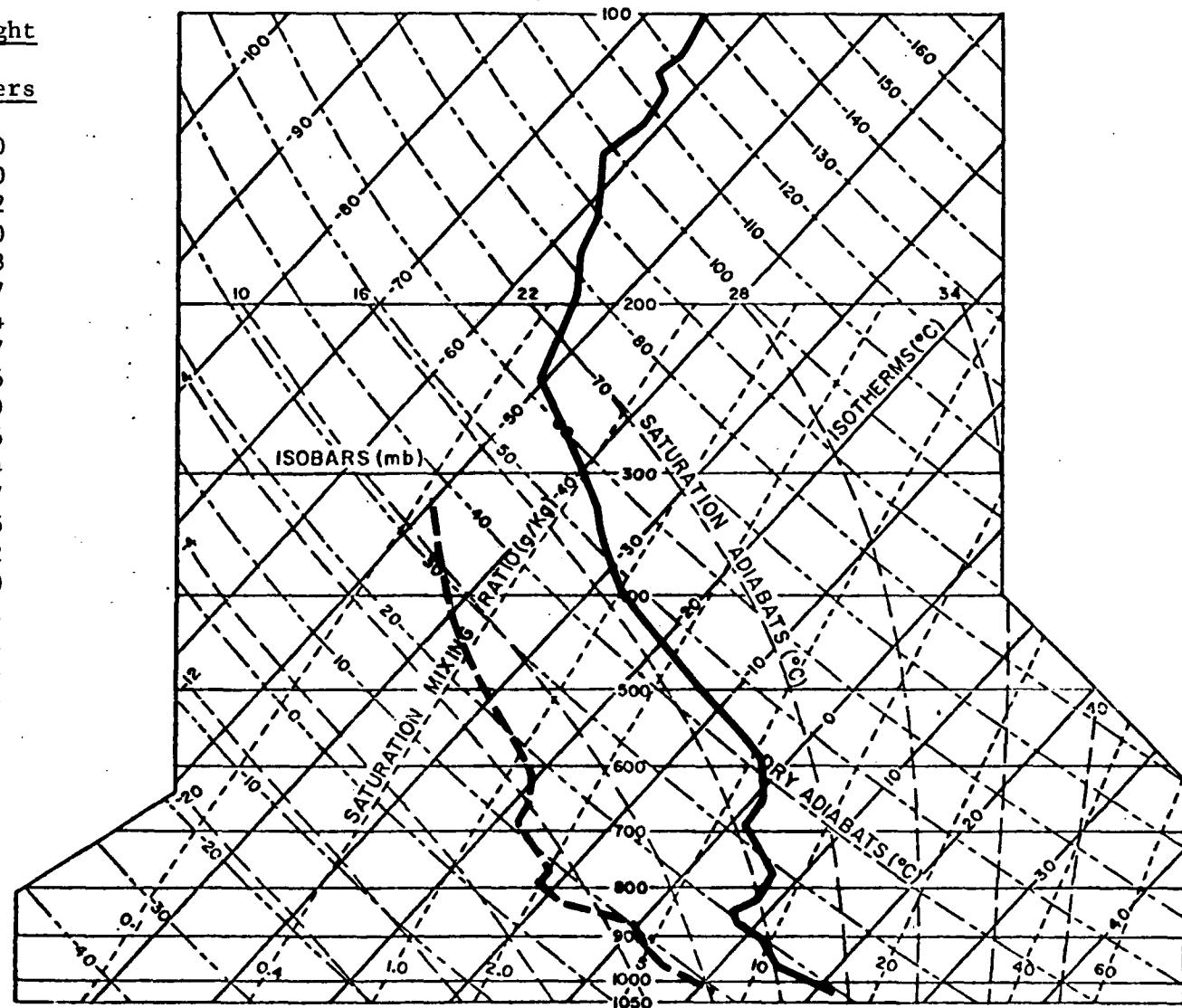


FIGURE 5. Machine processed radiosonde data available from Mississippi Test Facility 1500 GMT, 4 May 1972

TABLE 2
NATIONAL WEATHER SERVICE
SURFACE METEOROLOGICAL OBSERVATIONS
4 MAY 1972

TIME <u>C.D.T</u>	STATION	PRESSURE <u>MB</u>	TEMPERATURE		DEW POINT		R.H. %	WIND <u>DIRECTION</u>	KNOTS
			F.	C.	F.	C.			
0900	Pensacola, Fla.	1019.6	70	21.1	53	11.7	54.8	20	2
	N.O. Audubon-Park	1002.4	71	21.7	60	15.6	68.2	270	4
	Biloxi, Miss.	--	71	21.7	56	13.3	59.1	360	2
	Valpariso, Fla.	1012.5	60	15.6	50	10.0	69.5	350	4
	Mobile, Ala.	1019.3	69	20.6	56	13.3	63.2	0	0
1000	Pensacola, Fla.	1020.0	72	22.2	53	11.7	51.2	350	6
	N.O. Audubon-Park	1002.4	73	22.8	58	14.4	59.3	0	5
	Biloxi, Miss.	1020.9	73	22.8	55	12.8	53.2	320	1
	Valpariso, Fla.	1015.9	59	15.0	49	9.4	69.4	340	2
	Mobile, Ala.	1019.3	72	22.0	55	12.8	55.1	240	3
1100	Pensacola, Fla.	1020.3	75	23.9	51	10.6	43.0	20	9
	N.O. Audubon-Park	1002.4	75	23.9	56	13.3	51.6	0	7
	Biloxi, Miss.	--	76	24.4	55	12.8	48.2	280	3
	Valpariso, Fla.	1015.9	59	15.0	48	8.9	66.8	330	4
	Mobile, Ala.	1019.3	74	23.3	55	12.8	51.5	290	9
1900	Pensacola, Fla.	1019.0	76	24.4	48	8.9	37.2	340	7
	N.O. Audubon-Park	1012.5	75	23.9	50	10.0	41.4	315	7

TABLE 2
NATIONAL WEATHER SERVICE
SURFACE METEOROLOGICAL OBSERVATIONS
4 MAY 1972

<u>TIME</u> <u>C.D.T</u>	<u>STATION</u>	<u>PRESSURE</u> <u>MB</u>	<u>TEMPERATURE</u>		<u>DEW POINT</u>		<u>R.H.</u> <u>%</u>	<u>WIND</u> <u>DIRECTION</u>	<u>KNOTS</u>
			<u>F.</u>	<u>C.</u>	<u>F.</u>	<u>C.</u>			
1900	Biloxi, Miss.	1021.1	76	24.4	56	13.3	49.9	200	7
	Valpariso, Fla.	1015.9	75	23.9	47	8.3	37.0	350	6
	Mobile, Ala.	1019.3	75	23.9	51	10.6	43.0	320	5
2000	Pensacola, Fla.	1019.6	71	21.7	49	9.4	45.7	340	6
	N.O. Audubon-Park	1012.5	71	21.7	52	11.1	51.0	315	4
	Biloxi, Miss.	--	79	26.1	57	13.9	46.9	220	8
	Valpariso, Fla.	1019.3	71	21.7	46	7.8	40.8	320	4
	Mobile, Ala.	1019.3	70	21.1	52	11.1	52.8	340	4
2100	Pensacola, Fla.	1020.3	68	20.0	50	10.0	52.5	340	5
	N.O. Audubon-Park	1012.5	69	20.6	53	11.7	56.7	315	2
	Biloxi, Miss.	--	80	26.7	58	14.4	47.0	200	8
	Valpariso, Fla.	1019.3	68	20.0	46	7.8	45.2	340	2
	Mobile, Ala.	1019.3	66	18.9	53	11.7	62.9	350	5

<u>Pressure</u>	<u>Temp.</u>	<u>Dew Point</u>	<u>Height</u>
<u>Millibars</u>	<u>Centigrade</u>		<u>Meters</u>
1019.0	20.0	12.0	0
1004.0	22.0	12.6	128
987.8	20.9	10.0	269
983.0	20.6	9.3	311
957.2	18.4	8.2	536
927.7	15.8	6.9	801
899.1	13.2	5.6	1066
871.5	10.6	4.3	1331
858.0	9.2	3.7	1464
843.8	8.4	2.7	1601
842.0	8.3	2.6	1620
826.0	10.3	-6.2	1779
818.5	9.9	-6.6	1853
794.3	8.4	-8.0	2102
770.8	7.0	-9.4	2350
767.0	6.7	-9.6	2391
747.3	7.4	-9.5	2605
745.0	7.4	-9.5	2631
723.1	6.0	-10.8	2873
699.5	4.4	-12.2	3143
676.7	2.8	-13.5	3412

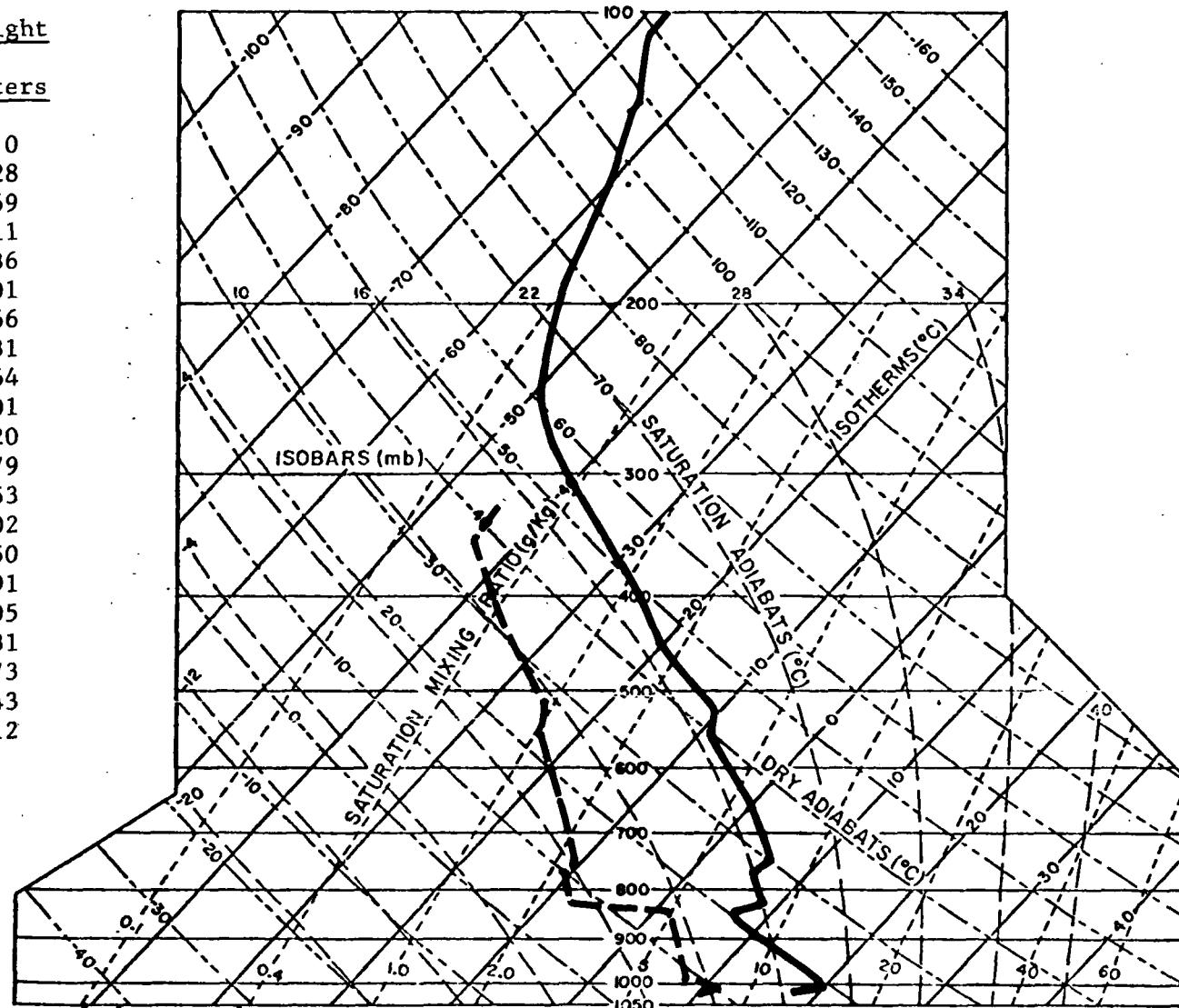
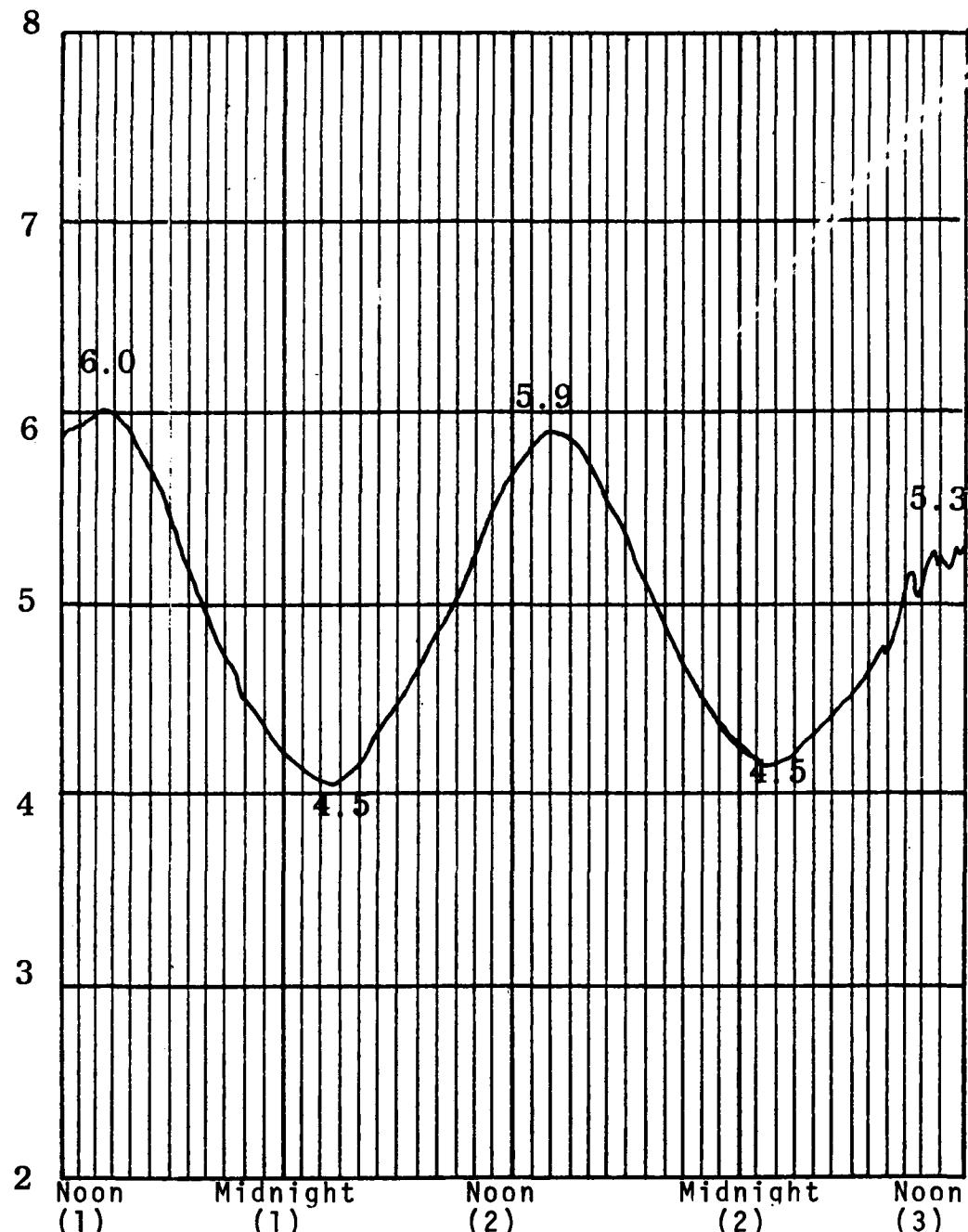
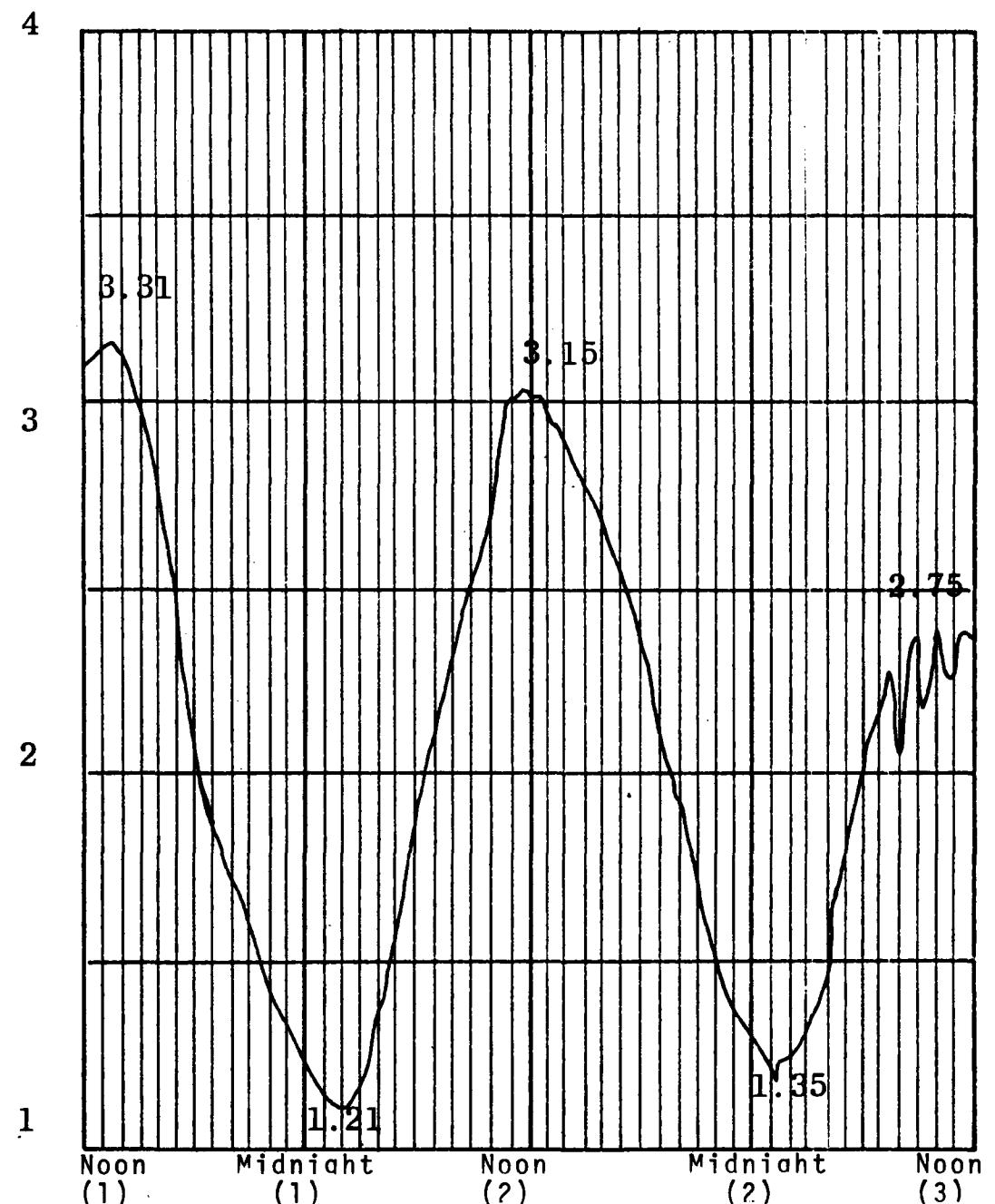


FIGURE 6.

Machine processed radiosonde data available from
Mississippi Test Facility 0030 GMT, 5 May 1972



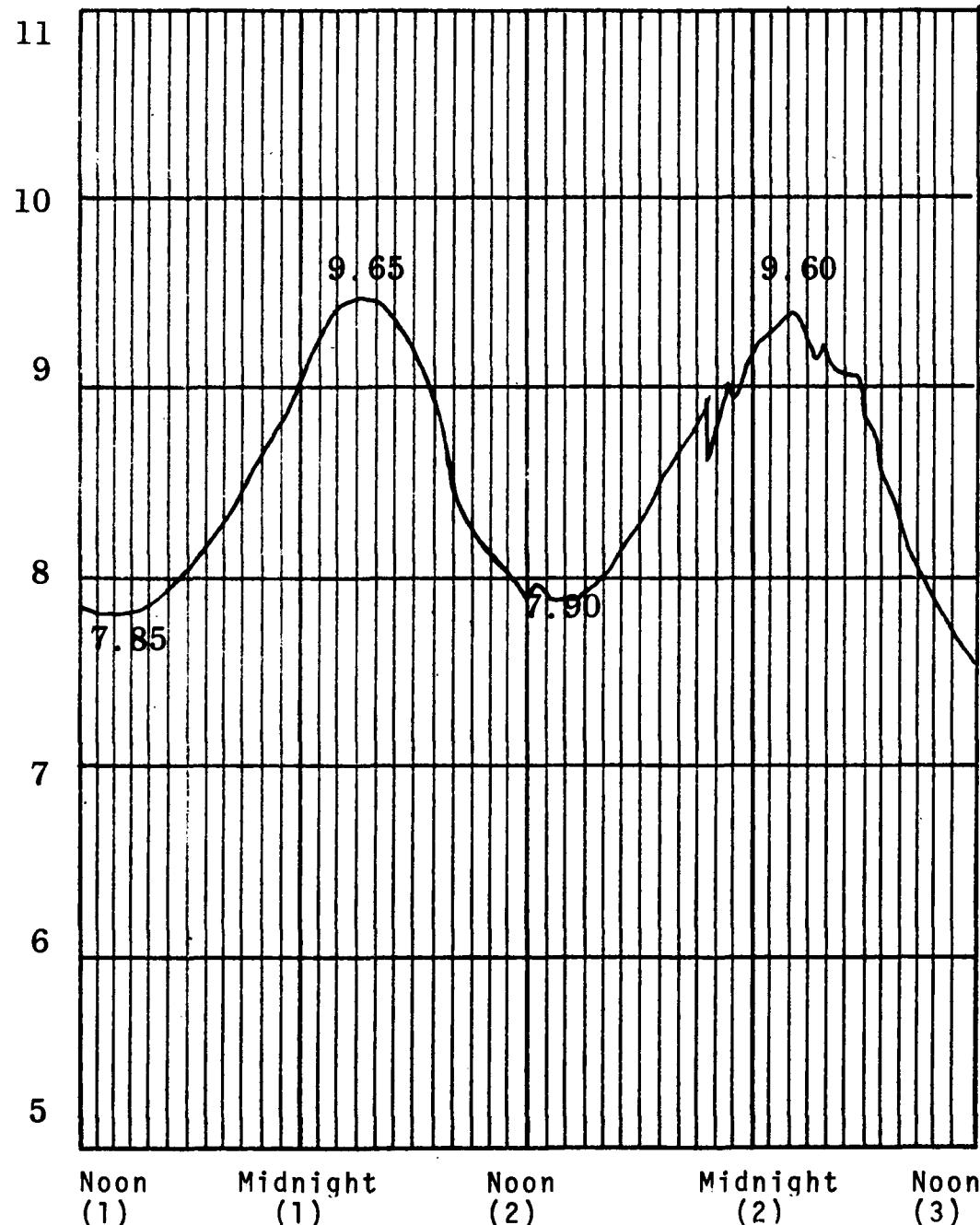
Fowl River Point, Ala.
Gage Zero - 4.35' MSL



Fowl River Point - Mobile
State Docks, Ala.
1, 2, 3 May 1972

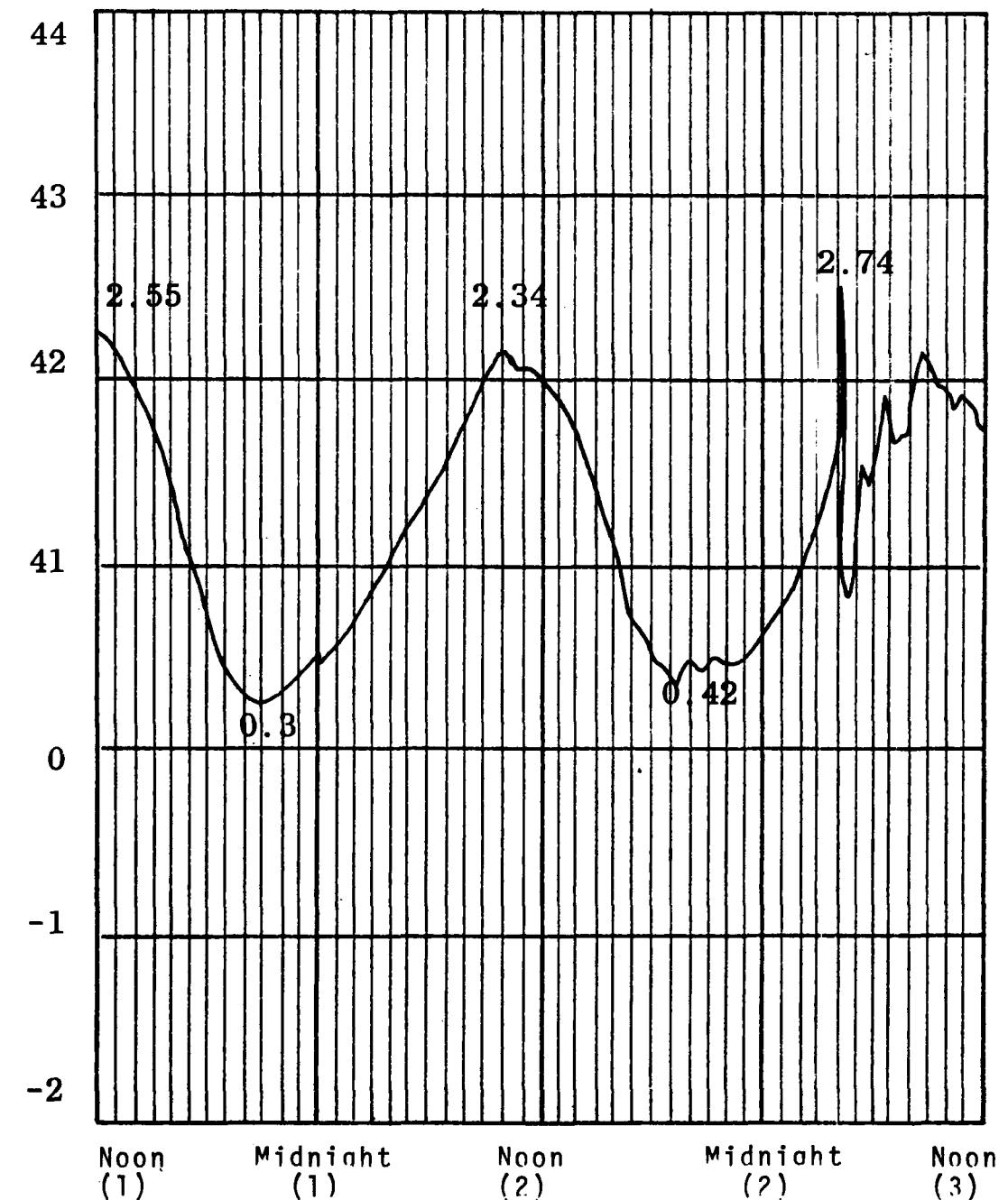
Mobile State Docks, Ala.
Gage Zero, - 0.83' MSL

SOURCE: MOBILE CORPS OF ENGINEERS



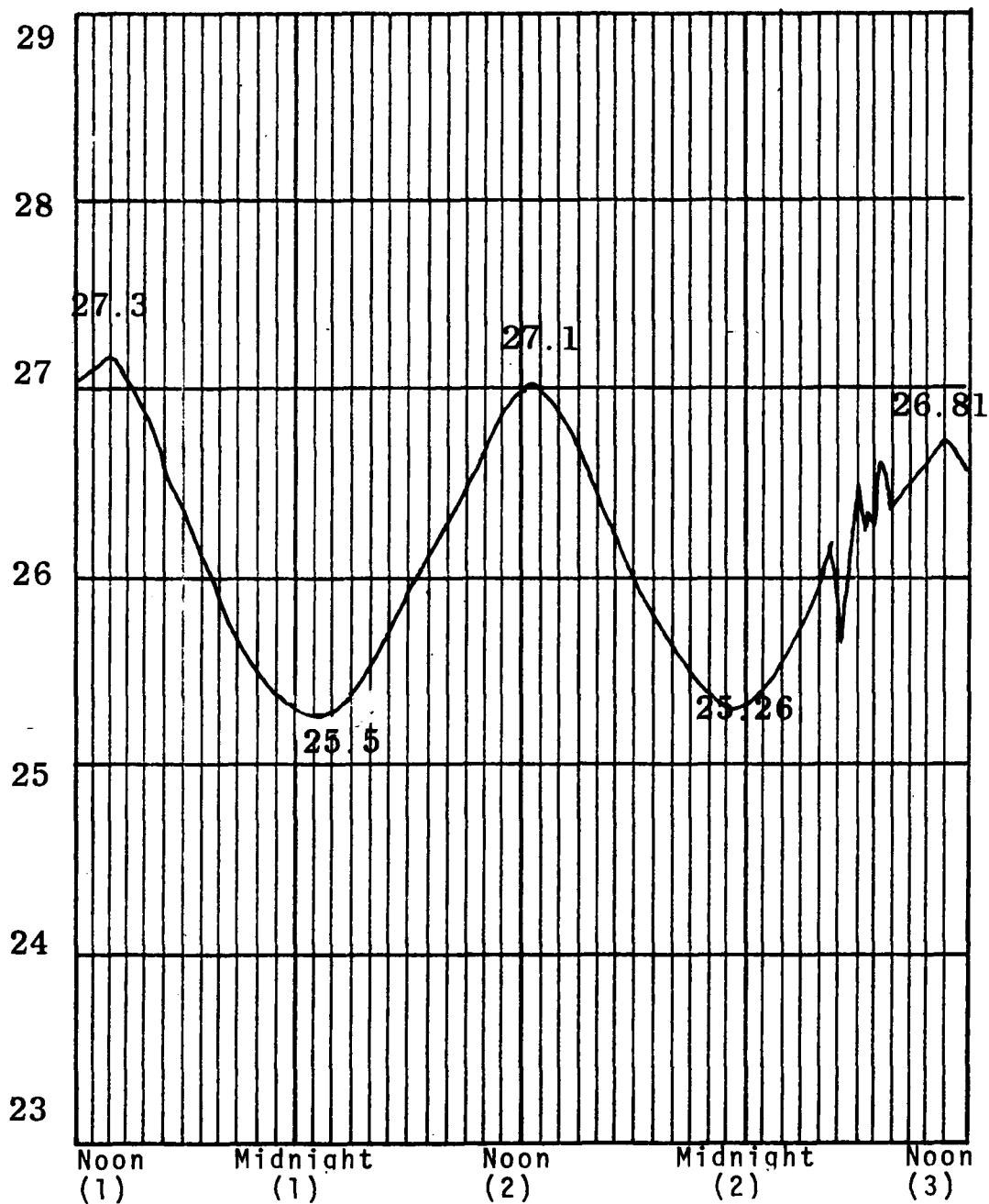
Dauphin Island, Ala. (Gulf)
Gage Zero - 7.54 ft MSL

Dauphin Island, Ala. - Gulf
& Marine Lab.
1, 2, 3 May 1972



Dauphin Island, Ala. - Marine Lab.
Gage Zero -0.23 ft MSL
SOURCE: MOBILE CORPS OF ENGINEERS

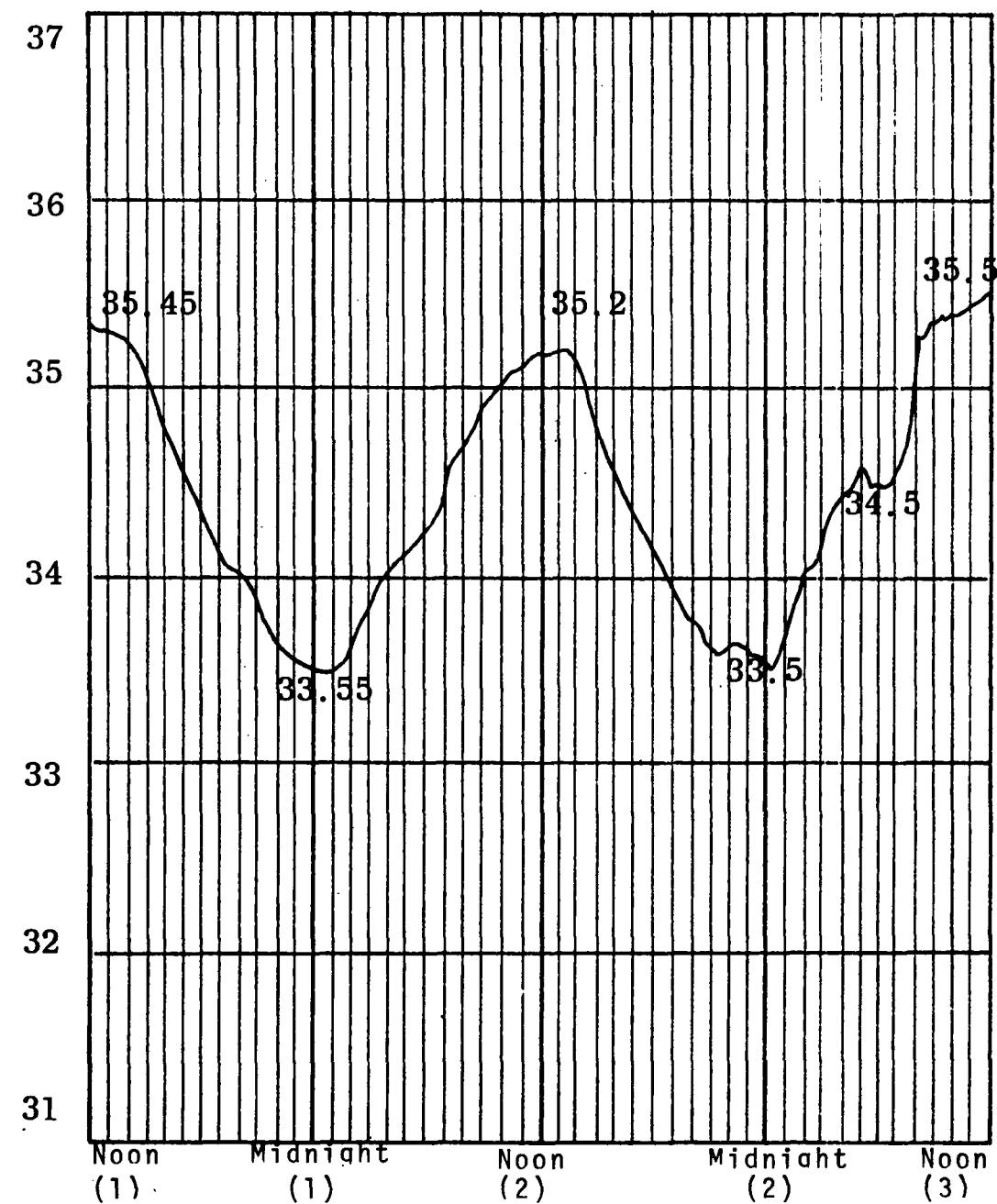
FIGURE 8.



Point Clear, Ala.
Gage Zero - 25.29' MSL

Point Clear & BonSecour, Ala.
1, 2, 3 May 1972

FIGURE 9.



BonSecour, Ala.
Gage Zero - 33.53' MSL

SOURCE : MOBILE CORPS OF ENGINEERS

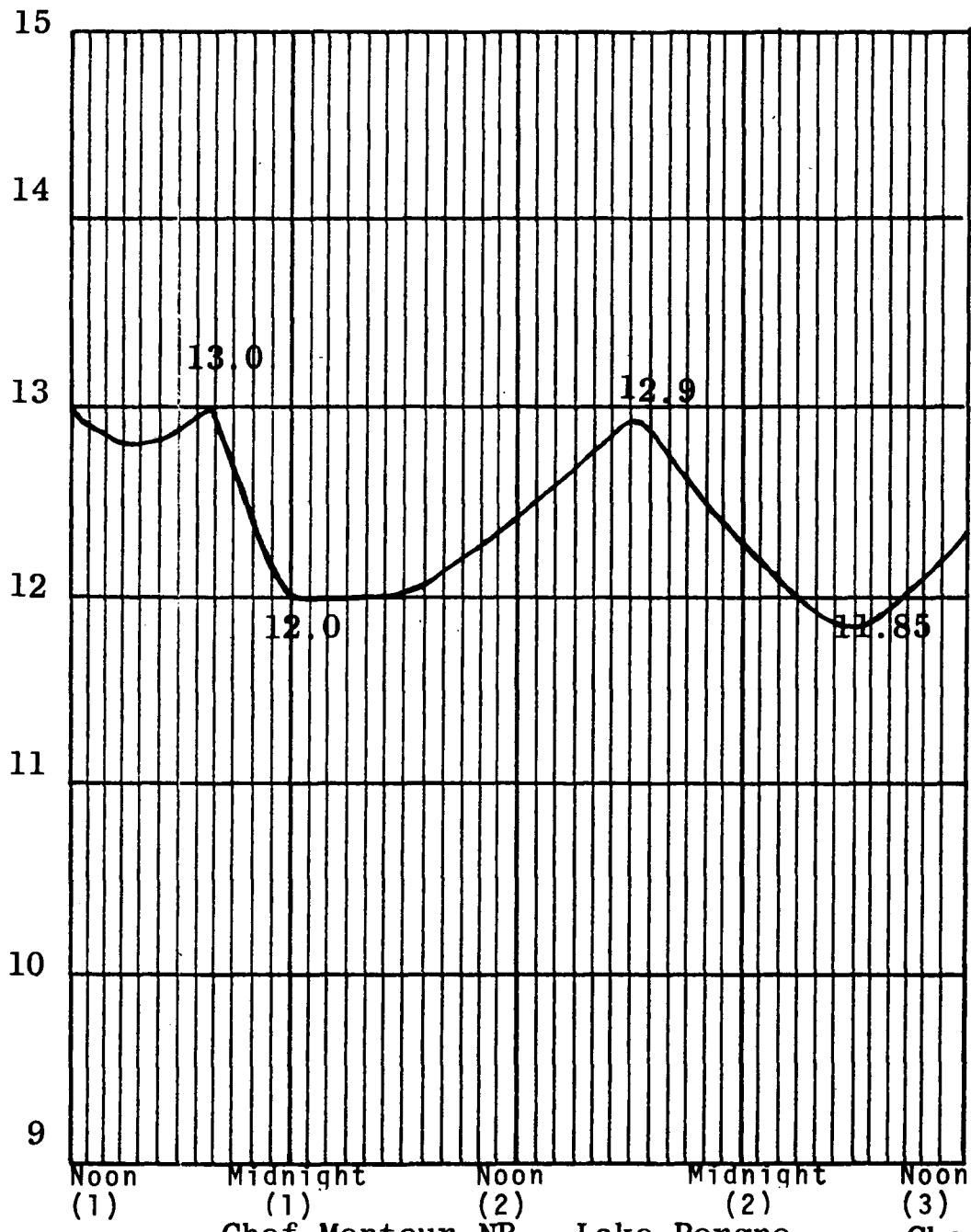


FIGURE 10.

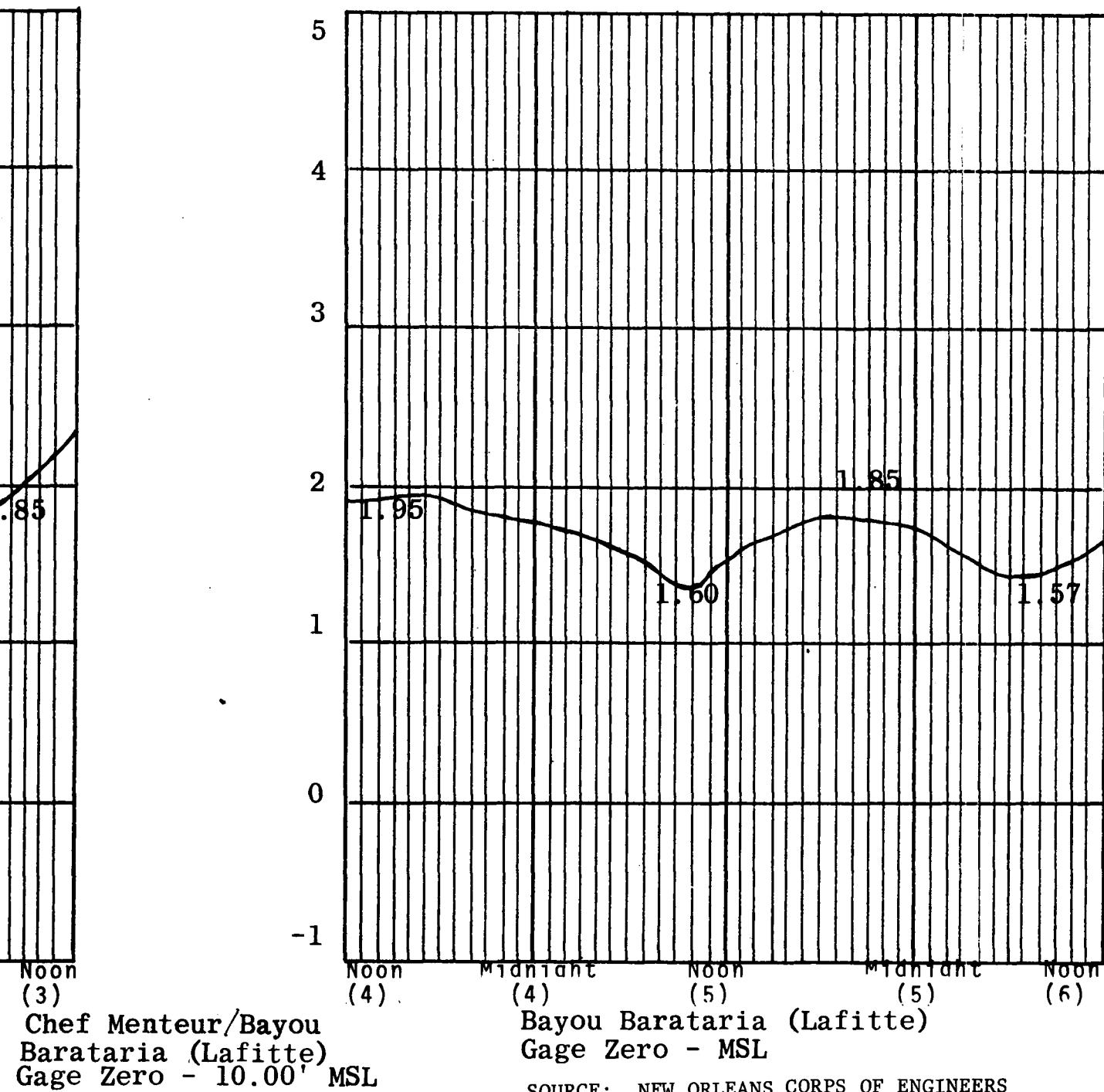


TABLE 3
MISSISSIPPI SOUND IV STATION LOCATIONS

FLIGHT LINES	STA	SCHEDULED SAMPLE TIME	LATITUDE	LONGITUD	LANDMARK---DISTANCE AND HEADING FROM	DIS NM	MGN HDG
16	0	1313	30 22.8N	89 35.8W	MTF TARGET POND		
01	01	0830	30 06.8N	89 44.7W	TRULOIX PT.	0.7	256
01,12	02	0831,1217	30 08.3N	89 43.8W	BAY JAUNE PT.	0.9	278
01,12	03	0832,1215	30 08.6N	89 36.7W	QK.FL.15FT.BEACON	0.3	348
01,12	04	0834,1213	30 08.9N	89 27.1W	NW PT. GRAND I.	.07	295
01,12,14	05	0835,1210,1246	30 09.1N	89 18.8W	FL. 4 SEC.	1.8	192
01,12,15	06	0836,1207,1350	30 09.6N	89 11.8W	07 FL. 4 SEC.	4.1	153
01,12	07	0837,1204	30 09.6N	89 06.2W	FL.4SEC. 30FT. N2	1.3	150
01,12	08	0839,1202	30 09.9N	88 58.1W	R 06 FL.R 4SEC.		
01	09	0841	30 10.7N	88 47.0W	01 FL.4SEC. RA REF	2.2	173
01	10	0843	30 11.7N	88 33.7W	FL. R 4SEC.	2.2	262
01	11	0844	30 11.8N	88 31.3W	FL. R 4SEC.		
01	12	0845	30 12.3N	88 23.2W	PETIT BOIS I. ETIP	1.1	084
01	13	0846	30 12.7N	88 18.4W	FL.2-1/2SEC. BELL		
01	14	0847	30 14.0N	88 06.7W	BN. 02		
01	15	0848	30 14.5N	88 04.4W	RN. 04		
01,10	16	0848,1118	30 13.7N	88 02.7W	06 SEC. N15	0.5	296
01	17	0849	30 15.5N	87 58.8W	QK. FL. N277		
01	18	0850	30 14.9N	87 52.3W	FL.4SEC.277 RA REF	2.3	170

TABLE 3
MISSISSIPPI SOUND IV STATION LOCATIONS, CONT.

FLIGHT LINES	STA	SCHEDULED SAMPLE TIME	LATITUDE	LONGITUD	LANDMARK---DISTANCE AND HEADING FROM	DIS NM	MGN HDG
02	19	0857	30 17.0N	87 49.0W	FL.4SEC.189 RA REF		
02	20	0858	30 17.0N	87 54.9W	QK. FL.N247		
02,10	21	0859,1119	30 17.3N	88 01.9W	FL. R 5-1/2 SEC.		
02	22	0900	30 17.0N	88 04.9W	FL.R 4SEC.02RA REF		
02	23	0901	30 16.7N	88 09.3W	QK. FL. N01		
02	24	0902	30 15.9N	88 13.9W	RN. N70		
02	25	0902	30 15.7N	88 16.1W	82 RA REF		
02	26	0903	30 15.4N	88 21.0W	R 84 FL.4SECRA REF		
02	27	0904	30 14.9N	88 26.0W	BW GB MOXA) RA REF		
02	28	0905	30 14.9N	88 30.4W	RN 22		
02	29	0906	30 14.7N	88 34.2W	RN 22	3.2	262
02	30	0908	30 13.8N	88 48.7W	W TIP HORN ISLAND	2.1	240
02,11	31	0909,1157	30 13.5N	88 52.5W	E TIP SHIP ISLAND	1.1	184
02	32	0910	30 13.1N	88 59.1W	W TIP SHIP ISLAND	0.5	014
02	33	0910	30 12.9N	89 02.6W	S PT. CAT ISLAND	2.3	078
02,15	34	0912,1353	30 12.3N	89 10.6W	W TIP CAT ISLAND	1.8	212
02	35	0913	30 11.9N	89 16.7W	FL.4SEC.17FT.N18		
02	36	0914	30 10.6N	89 22.0W	FL. 4 SEC. BEACON		
02	37	0915	30 10.9N	89 25.6W	FL.4SEC.30FT.N22		

TABLE 3
MISSISSIPPI SOUND IV STATION LOCATIONS, CONT.

FLIGHT LINES	STA	SCHEDULED SAMPLE TIME	LATITUDE	LONGITUD	LANDMARK---DISTANCE AND HEADING FROM	DIS NM	MGN HDG
02	38	0916	30 10.5N	89 36.2W	RB BCON LITTLE LK.		
02	39	0917	30 10.1N	89 43.4W	FL.4SEC.17FT. N01	1.0	105
02	40	0918	30 09.8N	89 45.9W	FL.R 4SEC.17FT.N2	.95	206
03	41	0924	30 14.5N	89 23.5W	CLERMONT HARBOR	1.5	119
03,14	42	0925,1243	30 14.6N	89 19.1W	FL.R4SEC17FT2RAREF	1.8	180
03	43	0926	30 15.5N	89 13.0W	R 4PM FL.R4SEC.R-R		
03,15	44	0927,1354	30 15.4N	89 08.9W	01 FL. 4 SEC.	1.3	175
03	45	0929	30 16.2N	89 00.9W	R 52 FL. R 4 SEC.		
03,11	46	0930,1156	30 16.6N	88 52.2W	BW S1 M0%A) RA REF	1.0	114
03	47	0932	30 17.2N	88 44.7W	RA REF BW BF M0%A)		
03	48	0933	30 16.8N	88 38.2W	05 FL. 4 SEC.		
03	49	0934	30 17.1N	88 30.8W	QK. FL. G 31		
03	50	0936	30 18.4N	88 24.2W	BW GB M0%A) RA REF	3.9	019
03	51	0937	30 19.8N	88 17.6W	FL.4 SEC.30 FT.N1		
03	52	0937	30 18.1N	88 16.1W	FL. R 4 SEC.RA REF		
03	53	0938	30 18.1N	88 11.4W	BARRON POINT	0.8	172
03,10	54	0939,1120	30 20.1N	88 01.4W	FL. G 4 SEC. N11		
03	55	0940	30 20.7N	87 58.3W	FL. 2-1/2 SEC.N12	2.8	089
04	56	0947	30 24.3N	87 55.2W	FL.4SEC30FT.RA REF		

TABLE 3
MISSISSIPPI SOUND IV STATION LOCATIONS, CONT.

FLIGHT LINES	STA	SCHEDULED SAMPLE TIME	LATITUDE	LONGITUD	LANDMARK---DISTANCE AND HEADING FROM	DIS NM	MGN HDG
04,10	57	0948,1121	30 23.2N	88 01.1W	FL. R 4SEC. 16 RR		
04	58	0950	30 23.2N	88 04.1W	FL.R 4SEC. 16 RA R	2.5	268
04	59	0951	30 21.8N	88 16.7W	FL.G 4SEC.17FT.N9		
04	60	0954	30 19.9N	88 30.8W	QK. FL. 20 FT.		
04	61	0954	30 20.4N	88 33.9W	QK.FL.30FT.43 RA R		
04	62	0955	30 20.6N	88 39.7W	FL.R 4SEC.30FT.N2	3.0	288
04	63	0957	30 19.8N	88 46.5W	FL.R 4SEC.17FT.N8		
04,11	64	0958,1154	30 19.5N	88 51.7W	FL. 4SEC. 30FT.N2	2.8	127
04	65	0959	30 19.3N	88 58.2W	R WR2 QK.FL.R	2.4	300
04	66	1000	30 19.5N	89 03.6W	FL.R 4SEC.30FT.N68	.65	140
04,15	67	1000,1356	30 18.7N	89 07.3W	S TIP GULFPORT P.	2.8	210
04	68	1002	30 18.1N	89 15.3W	FL.G 4SEC.17FT.N1		
04,14	69	1003,1241	30 17.8N	89 19.3W	FL.R4SEC17FTTRA REF	1.5	345
05,14	70	1009,1240	30 20.8N	89 19.5W	FL. 4SEC.17FT.N5	0.4	105
05	71	1010	30 20.8N	89 18.0W	FL.G 4SEC. 17FT.N3		
05,15	72	1013,1357	30 21.1N	89 06.2W	QK. FL. 05	0.4	265
05	73	1014	30 22.3N	88 57.8W	FL. G 4 SEC. N3		
05,11	74	1015,1152	30 22.9N	88 51.4W	BILOXI SE	0.5	155
05	75	1016	30 22.2N	88 48.0W	18 FL.R 4SEC. 25FT		

TABLE 3
MISSISSIPPI SOUND IV STATION LOCATIONS, CONT.

FLIGHT LINES	STA	SCHEDULED SAMPLE TIME	LATITUDE	LONGITUD	LANDMARK---DISTANCE AND HEADING FROM	DIS NM	MGN HDG
05,08,10	76	1025,1050,1123	30 26.7N	88 00.7W	QK.FL.R 22 RA REF	0.1	270
03	77	1041	30 21.1N	87 52.6W	FL. 4SEC. 01	1.7	225
06	78	1032	30 32.5N	87 55.5W	R 4SEC. 17FTRA REF	0.8	259
06	79	1033	30 36.3N	87 55.9W	VILLAGE POINT	1.4	204
07	80	1042	30 38.6N	87 59.5W	FL.R 4SEC.N40	2.1	070
07	81	1044	30 34.6N	87 59.3W	FL.R 2-1/2SEC34 RR	2.0	080
08,10	82	1051,1125	30 31.4N	88 01.4W	FL.G 4SEC. 1RA REF		
08,10	83	1052,1127	30 34.4N	88 01.6W	FL.R 2-1/2SEC.N34		
08,10	84	1054,1128	30 38.1N	88 01.9W	FL.R 4SEC 40		
09	85	1104	30 33.9N	88 04.6W	FL. 2-1/2 SEC.N1		
08	86	1052	30 31.4N	88 04.1W	FL. R 4 SEC. N10		
09	87	1106	30 27.1N	88 05.7W	FL.2-1/2SEC2RA REF		
10	88	1117	30 12.2N	88 02.9W	FL. G 4 SEC.	0.2	270
10	89	1116	30 08.9N	88 03.4W	FL. R 6 SEC. BELL		
14,15	90	1249,1348	29 56.5N	89 18.1W	E TIP MUD CROOKED	3.6	172
15	91	1341	29 42.0N	89 25.1W	FL.R4SEC.30FT.N90	0.6	129
15	92	1340	29 33.0N	89 29.4W	FL. 4SEC.15FT. N1	0.7	088
15	93	1333	29 22.7N	89 34.5W	RADIO TOWER	1.3	305
15	94	1331	29 14.8N	89 38.1W	FL.R 4SEC.30FT.N2	1.6	258

TABLE 3
MISSISSIPPI SOUND IV STATION LOCATIONS, CONT.

FLIGHT LINES	STA	SCHEDULED SAMPLE TIME	LATITUDE	LONGITUD	LANDMARK---DISTANCE AND HEADING FROM	DIS NM	MGN HDG
12	95	1214	29 08.8N	89 39.4W	FL. G 4SEC. RA REF	0.6	180
14	96	1311	29 00.8N	89 15.5W	PIC.BAYU F INT.N5	3.7	253
14	97	1309	29 08.3N	89 15.5W	QK.FL.HORN%NOV-AP)	0.7	205
14	98	1307	29 12.7N	89 15.6W	FL. 5SEC. HORN	0.4	016
14	99	1301	29 27.6N	89 16.5W	W PT. BRETON IS.	3.2	264
14	100	1258	29 36.3N	89 17.1W	FL.R4SEC.22FT.N66	0.2	162
14	101	1253	29 48.8N	89 17.5W	QK. FL. 12 FT.	0.9	262
12	102	1218	30 08.1N	89 48.7W	FL.4SEC.17FT. N6	2.1	356
01	103	0845	30 11.7N	88 20.7W	FL.2-1/2 SEC. BELL	2.2	238
04	104	0952	30 21.9N	88 21.0W	PT. AUX. PINS	1.8	248
03	105	0939	30 19.9N	88 06.2W	CEDAR POINT	2.1	050
01	106	0832	30 07.7N	89 31.9W	FL.G4SEC.18FT.RA R	1.7	193
02	107	0915	30 10.7N	89 31.4W	FL.G4SEC.18FT.RA R	1.3	355
01,11	108	0840,1158	30 10.4N	88 52.9W	R 06	4.5	079
02	109	0901	30 15.6N	88 12.8W	E INT. 6 SEC.		
02	110	0901	30 16.3N	88 10.7W	QK.FL.4SEC. RA REF		
01	111	0848	30 15.9N	88 02.3W	FL. G 4 SEC. N3	0.1	090
02	112	0900	30 17.7N	88 07.2W	N 08		
03	113	0928	30 15.8N	88 04.0W	N PT. CAT ISLAND	0.8	356

TABLE 3
MISSISSIPPI SOUND IV STATION LOCATIONS, CONT.

FLIGHT LINES	STA	SCHEDULED SAMPLE TIME	LATITUDE	LONGITUD	LANDMARK--DISTANCE AND HEADING FROM	DIS NM	MGN HDG
05,11	114	1015,1151	30 24.6N	88 51.1W	JUST N RAILROAD		
05	115	1025	30 26.9N	87 58.0W	FL.4SEC.37FTRA REF	1.8	196
07	116	1045	30 31.4N	87 58.5W	FL.G4SEC. 01RA REF	2.6	077
A	117	0922	30 06.0N	89 26.5W	N TIP LE PETIT	1.4	081
A	118	0925	30 05.4N	89 35.8W	FL 4 SEC 17 FT #19#	3.9	024
C	119	1004	30 01.5N	89 38.0W	ALLIGATOR PT	4.3	085
D	120	1021	29 53.3N	89 42.8W	ALLIGATOR PT	2.3	172
F	121	1049	29 55.7N	89 39.6W	FL 4 SEC 25 FT #2#	3.5	008
7	122	1046	30 49.9N	87 56.9W	C #7# N #8#		
6	123	1035	30 49.3N	87 55.3W	LOWER HALL LDG		
8	124	1100	30 47.3N	88 00.8W	FL 4 SEC 17 FT #6#		
6	125	1034	30 45.3N	87 55.5W	STEAM MILL LDG		
8	126	1110	30 43.7N	88 02.6W	OFF MAGAZINE PT		
6	127	1033	30 42.6N	87 56.4W	BLAKELY RD AT CUT 0		

TABLE 4

MEASUREMENTS FROM THE "SEA FARGER" - 4 May 1972

<u>TIME (CDT)</u>	<u>COORDINATES</u>		<u>AIR TEMP. °C</u>	<u>WATER TEMP. °C</u>	<u>BAROMETRIC PRESSURE</u>	<u>HUMIDITY o/o</u>	<u>REMARKS</u>
0913	30°08.8'N	88°19.0'W	23.4	23.5	30.20	22	Clear visibility 20 mi
0918	30°09.3'N	88°19.0'W	23.4	23.4	30.27	29	Sea calm
0922	30°09.4'N	88°19.0'W	22.8	23.4	30.27	30	
0926	30°09.5'N	88°19.0'W	22.8	23.8	30.27	35	
0930	30°09.6'N	88°19.0'W	22.8	23.8	30.27	39	Brown-Green water
0936	30°09.7'N	88°19.0'W	23.4	23.8	30.27	39	Lots of Jelley Fish
1000	30°09.8'N	88°19.0'W	23.4	23.8	30.27	41	
1003	30°09.9'N	88°19.0'W	23.4	24.0	30.27	41	
1007	30°10.0'N	88°19.0'W	23.4	24.0	30.27	39	
1016	30°10.7'N	88°19.0'W	23.3	24.0	30.27	35	Visibility 20 mi
1031	30°10.9'N	88°19.0'W	23.9	24.1	30.27	34	Sea calm
1035	30°11.2'N	88°19.0'W	23.9	24.2	30.27	34	Aircraft not sighted
1039	30°11.4'N	88°19.0'W	24.4	24.3	30.27	31	
1048	30°11.7'N	88°19.0'W	25.5	24.8	30.27	29	
1051	30°11.9'N	88°19.0'W	25.5	25.0	30.27	29	
1054	30°12.1'N	88°19.0'W	25.5	25.0	30.27	29	
1056	30°12.3'N	88°19.0'W	25.5	25.0	30.27	28	Very little tide
1100	30°12.6'N	88°19.0'W	25.5	25.0	30.27	28	
1103	30°12.8'N	88°19.0'W	26.1	25.0	30.25	26	Aircraft not sighted

TABLE 4

MEASUREMENTS FROM THE "SEA FARER" - 4 May 1972

TIME <u>(CDT)</u>	COORDINATES		AIR TEMP. <u>° C</u>	WATER TEMP. <u>° C</u>	BAROMETRIC PRESSURE	HUMIDITY <u>o/o</u>	REMARKS
1106	30°13.1'N	88°19.0'W	26.1	25.0	30.25	26	Calm Sea
1108	30°13.3'N	88°19.0'W	26.7	25.0	30.25	25	
1111	30°13.5'N	88°19.0'W	26.7	25.2	30.25	24	
1114	30°13.8'N	88°19.0'W	26.7	24.9	30.25	24	
1118	30°14.0'N	88°19.0'W	27.2	24.8	30.25	24	
1121	30°14.2'N	88°19.0'W	27.2	24.9	30.25	24	
1125	30°14.5'N	88°19.0'W	27.2	25.0	30.25	24	Increasing Haze
1128	30°14.7'N	88°19.0'W	27.2	25.3	30.25	23	
1131	30°14.9'N	88°19.0'W	27.2	25.7	30.25	23	
1135	30°15.1'N	88°19.0'W	27.2	25.7	30.25	23	
1139	30°15.4'N	88°19.0'W	27.2	25.5	30.25	23	Fish Oil slick
1143	30°15.7'N	88°19.0'W	27.8	25.0	30.23	20	
1148	30°16.0'N	88°19.0'W	27.8	24.8	30.23	20	
1152	30°16.4'N	88°19.0'W	27.8	25.3	30.23	20	
1156	30°16.7'N	88°18.9'W	27.8	25.8	30.23	20	Cumulus clouds overhead
1200	30°16.8'N	88°18.8'W	28.3	26.0	30.23	20	
1204	30°17.1'N	88°18.8'W	28.3	26.1	30.23	20	20% cloud coverage
1207	30°17.4'N	88°18.7'W	28.3	26.2	30.23	20	

TABLE 4
MEASUREMENTS FROM THE "SEA FARER" - 4 May 1972

TIME (CDT)	COORDINATES		AIR TEMP.	WATER TEMP.	BAROMETRIC PRESSURE	HUMIDITY o/o	REMARKS
			° C	°C			
1210	30°17.7'N	88°18.6'W	28.3	26.0	30.23	20	Slight ripples
1213	30°17.9'N	88°18.4'W	28.3	25.1	30.23	20	
1216	30°18.3'N	88°18.4'W	28.3	25.2	30.23	20	
1222	30°18.5'N	88°18.3'W	27.8	25.2	30.23	18	At railroad bridge
1226	30°19.0'N	88°18.3'W	27.8	26.0	30.23	18	
1232	30°19.4'N	88°18.3'W	27.8	26.0	30.23	18	
1238	30°19.9'N	88°18.3'W	27.8	25.8	30.23	18	10% cloud coverage
1241	30°20.0'N	88°18.4'W	27.8	25.8	30.23	18	
1244	30°20.2'N	88°18.7'W	27.8	25.2	30.23	18	
1247	30°20.3'N	88°18.9'W	27.8	25.2	30.23	18	
1250	30°20.5'N	88°19.2'W	27.8	25.2	30.23	18	
1253	30°20.7'N	88°19.5'W	28.3	25.2	30.23	18	
1256	30°20.9'N	88°19.9'W	28.3	25.0	30.23	18	10% cloud coverage
1853	30°11.2'N	88°19.0'W	27.2	24.3	30.17	20	Flyover, sea .5'
1857	30°11.7'N	88°19.0'W	27.2	24.4	30.17	23	N Wind, Tide incoming
1901	30°12.2'N	88°19.0'W	27.2	24.7	30.17	24	
1905	30°12.8'N	88°19.0'W	26.7	24.7	30.17	25	Sea State 1.0'
1908	30°13.4'N	88°19.0'W	26.1	24.1	30.17	25	
1911	30°13.9'N	88°19.0'W	26.1	24.1	30.17	25	Bright sun glare on water

TABLE 4

MEASUREMENTS FROM THE "SEA FARER" - 4 May 1972

<u>TIME (CDT)</u>	<u>COORDINATES</u>		<u>AIR TEMP. °C</u>	<u>WATER TEMP. °C</u>	<u>BAROMETRIC PRESSURE</u>	<u>HUMIDITY o/o</u>	<u>REMARKS</u>
1915	30°14.5'N	88°19.0'W	26.1	24.1	30.17	25	Haze over land
1917	30°15.0'N	88°19.0'W	25.9	24.2	30.17	25	
1920	30°15.4'N	88°19.0'W	25.6	24.3	30.17	28	Large school of porpoise
1923	30°15.8'N	88°19.0'W	25.6	24.4	30.17	29	Plane over line 4
1926	30°16.4'N	88°19.0'W	25.0	24.1	30.17	29	
1929	30°16.8'N	88°18.8'W	25.0	24.2	30.17	29	.5' waves
1932	30°17.1'N	88°18.7'W	24.5	25.1	30.17	30	
1935	30°17.5'N	88°18.6'W	24.5	24.9	30.17	31	
1938	30°17.8'N	88°18.5'W	24.5	25.0	30.17	32	
1942	30°18.2'N	88°18.4'W	23.9	25.0	30.17	32	Outgoing tide
1945	30°18.5'N	88°18.3'W	23.9	24.8	30.17	32	At RR Bridge

TABLE 5

MEASUREMENTS FROM GULF COAST RESEARCH LABORATORY VESSELS, 4 May 1972

TIME (CDT)	COORDINATES		WATER TEMP. °C	SALINITY ‰	REMARKS
0930	30°21.8'N	88°47.3'W	22.8	--	
0935	30°20.4'N	88°46.5'W	22.4	--	
0950	30°17.25N	88°44.8'W	23.0	--	
1050	30°15.2'N	88°42.2'W	24.3	--	
0943	30°23.6'N	88°49.75'W	24.3	13.0	
0953	30°22.2'N	88°48.0'W	24.3	16.0	
1000	30°20.4'N	88°46.4'W	22.8	17.8	
1006	30°18.6'N	88°46.4'W	22.8	20.0	
1009	30°17.9'N	88°46.4'W	23.0	20.5	
1017	30°16.3'N	88°46.4'W	23.2	21.5	
1024	30°14.7'N	88°46.9'W	22.7	28.0	
1027	30°13.0'N	88°47.1'W	23.0	28.3	
1034	30°13.0'N	88°47.1'W	23.0	28.3	
1038	30°13.8'N	88°48.8'W	23.2	28.2	

TABLE 5

MEASUREMENTS FROM GULF COAST RESEARCH LABORATORY VESSELS - 4 May 1972

TIME (CDT)	COORDINATES	WATER TEMP. °C	SALINITY o/oo	REMARKS
1045	30°15.0'N 88°51.2'W	23.6	24.5	
1051	30°15.5'N 88°51.7'W	24.1	24.0	
1100	30°17.1'N 88°53.2'W	24.3	22.2	
1106	30°19.5'N 88°53.6'W	24.6	22.0	
1114	30°21.7'N 88°54.1'W	24.2	19.8	
1119	30°23.0'N 88°54.0'W	24.0	19.5	
1125	30°23.5'N 88°53.0'W	23.7	19.4	
1130	30°23.2'N 88°51.4'W	24.0	12.0	
1136	30°23.6'N 88°49.7'W	24.2	12.0	
1143	30°22.2'N 88°48.0'W	24.0	16.3	
1150	30°20.4'N 88°46.5'W	23.8	16.1	
1155	30°20.4'N 88°46.9'W	24.1	21.5	
1202	30°21.3'N 88°48.1'W	23.8	16.2	

TABLE 6
MEASUREMENTS FROM MCE BOAT 1 - 4 May 1972

STATION	TIME(CDT)	WIND SPEED(KTS)	DIRECTION	AIR TEMP. °C	WATER TEMP. °C	SEA STATE FT.	REMARKS
21	1010	3	SE	21.4	23.5	0.5	Launched too late to see plane
54	1025	3	SE	21.4	23.5	0.5	Did not see or hear plane
55	1040	3	SE	21.2	23.6	0.5	
20	1105	5	SE	21.7	24.0	0.5	
17	1125	3	SE	22.1	23.7	0.5	
21	1140	3	SE	22.2	25.0	0.8	
21	1315	3	SE	24.5	24.3	0.5	

TABLE 7
MEASUREMENTS FROM MCE BOAT 2, 4 May 1972

STATION	TIME (CDT)	WIND SPEED (KTS.)	DIRECTION	AIR TEMP. °C	WATER TEMP. °C	SEA STATE FT.	REMARKS
58	0900	1	NE	19.9	22.2	0	
57	--	--	--	--	--	--	Deployed float #25
57	1024	0	--	21.8	23.6	0.5	
57	1035	0	--	21.5	23.9	0.5	
76	1110	1	NE	19.6	23.6	0.5	
76	1133	1.5	NE	21.1	23.3	0.5	
76	1136	1.5	NE	21.2	23.4	0.5	
87	1155	1.5	NE	23.4	23.8	0.5	

TABLE 8
MEASUREMENTS FROM MCE BOAT 3, 4 May 1972

STATION	TIME (CDT)	WIND SPEED(KTS.)	DIRECTION	AIR TEMP. °C	WATER TEMP. °C	SEA STATE FT.	REMARKS
82	0922	6	N	22.3	23.9	0.3	
116	0945	4	N	22.5	24.5	0.6	
116	1000	4	N	21.0	24.4	0.6	
116	1015	6	N	21.0	24.4	0.4	
116	1030	4	N	21.6	24.5	0.4	
116	1045	4	N	22.3	24.7	0.4	
116	1100	6	N	24.0	25.0	0.6	
116	1116	6	N	25.0	25.1	0.6	Plane not observed
86	1154	6	N	21.0	24.5	0.8	Plane not observed
86	1215	6	N	24.0	24.7	0.8	

TABLE 9

MEASUREMENTS FROM MCE BOAT 4, 4 May 1972

<u>STATION</u>	<u>TIME (CDT)</u>	<u>WIND SPEED (KTS.)</u>	<u>DIRECTION</u>	<u>AIR TEMP. °C</u>	<u>WATER TEMP. °C</u>	<u>SEA STATE FT.</u>	<u>REMARKS</u>
78	0945	2	NNW	19.8	23.0	Calm	
78	1110	5	NNW	22.0	23.5	1.0	Plane overhead at 1109
83	1140	2	NNE	22.0	23.5	1.0	
83	1200	1	NNE	21.0	23.0	0.5	Plane not observed
85	1215	1	NNE	22.0	24.0	0.5	Plane not observed

TABLE 10
MEASUREMENTS FROM MCE BOAT 5, 4 May 1972

<u>STATION</u>	<u>TIME (CDT)</u>	<u>WIND SPEED (KTS.)</u>	<u>DIRECTION</u>	<u>AIR TEMP. °C</u>	<u>WATER TEMP. °C</u>	<u>SEA STATE FT.</u>	<u>REMARKS</u>
123	1120	4	NNW	18.5	24.0	Moderate	Did not see plane
123	1125	4	NNW	18.5	24.0	Moderate	Did not see plane
123	1127	4	NNW	18.5	24.0	Moderate	
123	1130	4	NNW	18.5	24.0	Moderate	

TABLE 11

MEASUREMENTS FROM ALABAMA DEPARTMENT OF CONSERVATION - 4 May 1972

<u>TIME (CDT)</u>	<u>COORDINATES</u>		<u>SALINITY o/oo</u>	<u>WATER TEMP. °C</u>	<u>SEA STATE FT.</u>	<u>REMARKS</u>
1900	30°15.9'N	88°13.9'W	23.0	24.4	2.0	
1910	30°15.9'N	88°13.9'W	23.2	24.4	2.0	
1920	30°15.9'N	88°13.9'W	23.2	24.4	2.0	
1930	30°15.9'N	88°13.9'W	23.3	24.5	2.0	
1940	30°15.9'N	88°13.9'W	23.3	24.4	2.0	
1950	30°15.9'N	88°13.9'W	23.2	24.4	2.0	
2000	30°16.2'N	88°13.9'W	23.3	24.4	2.0	Heading N 1-2 knots
2010	30°16.5'N	88°13.9'W	23.3	24.4	2.0	
2020	30°16.9'N	88°13.9'W	24.0	24.3	2.0	Sighted plane flying West on line 2
2030	30°17.2'N	88°13.9'W	24.6	24.0	2.0	Strob light visable
2040	30°17.5'N	88°13.9'W	24.4	24.0	2.0	Completed North run and started South
2050	30°17.2'N	88°13.9'W	24.2	24.3	2.0	Sighted plane flying North
2100	30°16.9'N	88°13.9'W	24.3	24.0	2.0	Ended sampling

TABLE 12

 MISSISSIPPI SOUND IV
 SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP	SALNTY	AIR TEMP	RELAT HUMDY	WIND DIR	WIND SPD	SECH VISB	SEA STAT	CURRT	CUR DIR	WATER DEPTH	BUIL NU.	REMARKS
		FT	DEG C	PTS/K	DEG C	PERCT	DEG	KN	FT	FT	KN	DEG	FT		
2	1245	0	23.5	*****	***	****	***	***	***	***	***	***	***		
2	1300	0	23.5	*****	23.4	74.7	160	10	3.8	1.5	.19	195	*****		
2	1315	0	23.4	*****	***	****	***	***	***	***	***	***	***		
2	1330	0	23.5	*****	23.9	***	***	***	***	***	***	***	***		
2	1347	0	23.8	*****	24.2	78.4	135	15	3.8	1.0	.26	144	6.0	5	AIRCR OVERHD
3	935	0	22.7	*****	23.2	82.1	180	5	9.0	1.0	.42	180	20.0	7	
3	1245	0	23.4	*****	23.4	70.7	180	5	9.0	1.5	***	***	15.0		
3	1300	0	23.4	*****	22.0	***	***	***	***	***	***	***	***		
3	1330	0	23.8	*****	24.5	95.5	180	5	4.0	***	***	***	15.0	12	AIRCR OVERHD
4	930	0	20.3	*****	20.4	***	180	10	***	.5	***	***	8.0		
4	945	0	20.3	*****	20.4	***	***	***	5.0	1.0	.56	225	8.0	15	
4	1245	0	20.4	*****	**	***	***	***	***	.5	***	***	9.0		
4	1300	0	20.4	*****	20.5	***	160	10	4.0	.5	.52	225	9.0		
4	1330	0	20.4	*****	20.5	***	160	10	***	***	***	***	***		
4	1342	0	20.4	*****	20.5	***	***	***	4.0	.5	.56	225	9.0	14	FLYOVER
5	845	0	23.0	*****	24.6	***	135	3	5.5	1.0	***	***	15.0		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP	SALNTY	AIR TEMP	RELAT HUMDY	WIND DIR	WIND SPD	SECH VISB	SEA STAT	CURRT	CUR DIR	WATER DEPTH	BOTL NO.	REMARKS
	CDT	FT	DEG C	PTS/K	DG C	PERCT	DEG	KN	FT	FT	KN	DEG	FT		
5	900	0	23.1	*****	24.6	81.6	135	3	5.5	1.0	.30	315	15.0		
5	915	0	23.1	*****	24.2	*****	135	5	***	***	***	***	15.0		
5	930	0	23.2	*****	24.8	*****	135	***	***	***	***	***	15.0		
5	945	0	23.2	*****	25.3	*****	135	***	***	***	***	***	15.0		
5	1000	0	23.3	*****	24.4	78.4	135	10	5.5	1.5	.44	315	15.0		
5	1010	0	23.4	*****	24.4	82.5	135	10	6.0	1.0	.47	315	15.0	22	
5	1245	0	23.6	*****	25.9	78.4	135	10	6.0	1.0	.68	315	15.0		
5	1300	0	23.6	*****	25.8	78.4	135	6	6.0	1.0	.74	315	15.0	20	
5	1315	0	23.5	*****	25.9	78.1	135	10	6.0	1.5	.74	315	15.0		
5	1330	0	23.6	*****	25.4	74.7	135	10	6.0	1.5	.63	315	15.0		
5	1340	0	23.7	*****	25.5	74.7	135	10	6.0	1.5	.68	315	15.0	19	FL 12
5	1400	0	23.8	*****	25.5	*****	***	***	***	***	***	***	*****		
5	1415	0	23.9	*****	25.4	*****	***	***	***	***	***	***	*****		
5	1420	0	23.9	*****	25.5	74.7	135	10	6.0	1.5	.68	315	15.0	21	FL 14
6	950	0	23.5	*****	25.5	78.4	135	10	3.5	***	1.85	270	10.0	25	
6	955	0	23.5	*****	25.5	*****	***	***	***	***	***	***	*****		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SpD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BOTL NU.	REMARKS
		FT													
6	1315	0	23.8	*****	24.2	*****	160	1	4.0	.5	.25	290	12.0		
6	1330	0	23.8	*****	24.2	*****	160	1	4.0	.5	.22	290	12.0		
6	1338	0	23.8	*****	24.3	*****	160	1	4.0	.5	.22	290	12.0	16	AIRCR 5 MI S
6	1345	0	23.8	*****	24.4	*****	160	1	4.0	.5	.22	290	12.0		
6	1400	0	23.8	*****	24.4	*****	160	1	4.0	.5	.22	290	12.0		
6	1415	0	23.9	*****	24.4	*****	160	1	4.0	.5	.22	290	12.0		
6	1430	0	23.9	*****	24.0	*****	160	1	4.0	.5	.22	290	12.0		
6	1445	0	23.9	*****	24.0	*****	160	1	4.0	.5	.22	290	12.0		
6	1500	0	23.8	*****	24.0	*****	160	5	4.5	.5	.21	290	12.0		
6	1515	0	23.8	*****	24.0	*****	160	5	4.5	.5	.21	290	12.0		
6	1528	0	23.5	*****	23.9	*****	160	5	4.0	.5	.22	290	12.0		
7	1000	0	23.4	*****	25.0	*****	140	12	5.0	2.0	*****	***	*****		
7	1028	0	23.4	*****	25.0	*****	140	12	5.0	2.0	.15	180	26.0		P3A 5MI N
8	1010	0	23.0	*****	24.0	*****	135	10	8.5	2.0	*****	***	26.0		
8	1024	0	23.3	*****	25.5	*****	135	10	9.0	2.0	*****	***	26.0		
8	1055	0	23.3	*****	23.0	*****	135	10	10.0	2.0	.33	315	26.0		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP DEG C	SALNITY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BUIL NU.	REMARKS
	CUT	FT													
8	1155	0	23.5	*****	23.5	*****	135	10	6.5	200	.30	315	2600		
8	1255	0	23.2	*****	24.5	76.7	135	7	6.5	100	.29	315	2600	50	
8	1328	0	23.4	*****	25.4	74.7	135	5	10.0	100	.42	340	2600	52	AIRC 1.5MI S
9	945	0	23.2	*****	***	*****	***	***	***	***	***	***	***		
9	1000	0	23.2	*****	24.7	82.5	135	10	8.0	200	.09	***	*****	63	
9	1015	0	23.2	*****	***	*****	***	***	***	***	***	***	*****		
10	844	0	22.2	*****	23.0	86.1	135	10	5.0	100	.20	***	*****	98	
11	922	0	22.3	*****	23.2	86.1	135	10	6.5	100	.27	***	*****	95	
13	1030	0	22.3	25.60	23.8	*****	135	5	5.5	***	***	***	*****	133	
13	1100	0	23.0	25.70	23.1	*****	110	6	6.3	***	.81	270	*****		
13	1200	0	23.0	25.80	27.6	*****	110	6	6.0	***	.74	270	*****		
13	1230	0	23.4	25.70	25.0	*****	110	6	5.5	***	.63	315	*****		
13	1300	0	23.3	25.70	25.8	*****	135	6	5.5	***	.63	315	*****	134	
14	959	0	22.7	29.90	22.9	*****	135	12	4.5	200	.72	340	700		FLYUV 1010
15	1100	0	22.7	28.60	23.6	*****	135	12	2.5	200	.74	20	905		
15	1115	0	22.7	*****	***	*****	***	***	***	***	***	***	*****		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP CUT	WATER DEPH FT	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BUTL NO.	REMARKS
15	1130	0	22.8	*****	23.9	*****	***	***	***	***	***	***	***	***		
15	1145	0	22.8	*****	23.9	*****	***	***	***	***	***	***	***	***		
15	1200	0	22.9	28.00	24.7	*****	135	12	2.5	2.0	*****	20	9.5			
16	900	0	22.0	*****	21.0	*****	135	15	2.0	1.0	.74	200	14.0			
16	930	0	22.0	*****	21.5	*****	135	15	1.5	1.0	*****	***	14.0			
16	945	0	22.0	*****	21.5	*****	135	15	1.5	1.0	*****	***	14.0			
16	958	0	22.0	*****	21.8	*****	135	15	2.0	1.0	.79	200	14.0			
16	1015	0	22.0	*****	22.0	*****	135	15	***	1.0	*****	***	14.0			
16	1030	0	22.0	*****	22.0	*****	135	15	1.5	1.5	*****	***	14.0			
16	1104	0	22.0	*****	22.5	*****	135	15	2.5	2.0	.63	200	14.0			
16	1215	0	22.0	*****	25.5	*****	135	15	***	2.0	.44	***	14.0			
16	1240	0	22.0	*****	23.5	*****	135	15	2.0	2.0	*****	***	14.0		1239 FLYOVER	
16	1300	0	23.9	28.00	25.5	70.4	110	10	3.5	4.0	*****	***	*****	122		
17	942	0	22.8	18.30	***	*****	135	7	5.0	*****	*****	***	11.0			
17	944	5	22.7	28.60	***	*****	***	***	***	***	*****	***	*****			
17	945	10	22.6	29.10	***	*****	***	***	***	***	*****	***	*****			

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP CUT	WATER DEPH FT	TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND Spd KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BUIL NO.	REMARKS
17	947	0	22.9	*****	24.6	82.1	****	***	***	***	***	***	***	***	*****	
17	1005	0	28.9	*****	24.1	90.6	***	***	***	***	***	.44	230	*****	156	
17	1015	5	*****	*****	***	*****	***	***	***	***	***	*****	***	*****	165	
17	1016	10	*****	*****	***	*****	***	***	***	***	***	*****	***	*****	160	
18	930	0	22.5	*****	26.5	86.3	90	12	4.0	.5	.44	190	10.0			
18	955	0	22.5	*****	23.3	86.3	90	12	4.0	.5	.40	190	10.0			
20	1045	0	23.1	*****	25.0	66.5	110	8	4.0	1.0	*****	***	12.0			
20	1110	0	23.2	13.40	***	*****	***	***	***	***	*****	***	*****			
20	1110	5	22.6	15.90	***	*****	***	***	***	***	*****	***	*****			
20	1110	10	22.4	21.60	***	*****	***	***	***	***	***	.44	300	*****		
20	1120	0	*****	*****	***	*****	***	***	***	***	*****	***	*****			
20	1122	5	*****	*****	***	*****	***	***	***	***	*****	***	*****			
20	1125	10	*****	*****	***	*****	***	***	***	***	*****	***	*****			
20	1150	0	23.1	*****	23.4	78.1	110	7	4.0	.5	.59	310	12.0	155		
20	1155	0	23.1	14.00	***	*****	***	***	***	***	*****	***	*****			
20	1155	5	22.9	15.10	***	*****	***	***	***	***	*****	***	*****	161		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP	WATER	SALNTY	AIR	RELAT	WIND	WIND	SECH	SEA	CURRT	CUR	WATER	BOTL	REMARKS	
		DEPH	TEMP	PTS/K	TEMP	HUMDY	DIR	Spd	VISB	STAT	FT	DIR	DEPTH	FT	NO.	
		FT	DEG C	PTS/K	DEG C	PERCT	DEG	KN	FT	FT	KN	DEG	FT			
20	1155	10	22.1	23.40	****	*****	****	***	****	****	****	***	****	102		
21	1300	0	23.0	*****	23.0	*****	135	18	3.5	2.0	*****	***	16.0	153		
22	1028	0	23.4	14.70	24.2	*****	125	6	5.7	1.0	*****	***	*****	138	HEARD PLANE	
22	1029	5	23.7	18.10	23.8	*****	*****	***	****	****	*****	***	*****			
22	1030	10	22.8	27.10	****	*****	****	***	****	****	*****	***	*****			
22	1031	15	22.8	27.10	****	*****	****	***	****	****	*****	***	*****			
24	945	0	22.7	25.10	22.4	73.4	135	6	4.0	1.0	*****	***	*****	123		
24	945	5	22.7	25.80	****	*****	****	***	****	****	*****	***	*****	126		
26	1315	0	23.1	22.50	24.7	*****	135	6	5.5	****	.59	315	*****	135		
27	1300	0	23.6	*****	24.6	78.4	135	6	9.0	5.0	.21	27	19.0	103		
28	950	0	22.9	*****	23.4	86.3	****	***	****	****	*****	***	*****	97		
28	1145	0	22.9	*****	****	*****	****	***	****	****	*****	***	*****			
28	1200	0	22.9	*****	24.4	77.9	135	10	6.0	.5	*****	***	*****			
28	1215	0	22.9	*****	****	*****	****	***	****	****	*****	***	*****			
28	1230	0	23.0	*****	25.5	*****	****	***	****	****	*****	***	*****			
28	1300	0	23.0	*****	25.6	78.1	135	**.**	****	****	*****	***	*****			

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STA NUM	TIME	SAMP DEPH	WATER TEMP	SALNTY	AIR TEMP	RELAT HUMDY	WIND DIR	WIND SPD	SECH VISB	SEA STAT	CURRT	CUR DIR	WATER DEPTH	BUIL NU.	REMARKS
		CDT FT	DEG C	PTS/K	DG C	PERCT	DEG	KN	FT	FT	KN	DEG	FT		
26	1330	0	23.2	*****	23.6	*****	***	***	***	***	***	***	***		
28	1345	0	23.2	*****	***	*****	***	***	***	***	***	***	***		
31	1245	0	23.7	*****	***	*****	***	***	***	***	***	***	***		
31	1300	0	23.7	*****	24.2	71.1	180	10	7.5	3.0	.25	***	*****	64	
31	1315	0	*****	*****	***	*****	***	***	***	***	***	***	*****	83	
31	1315	0	*****	*****	***	*****	***	***	***	***	***	***	*****	65	
33	945	0	22.7	*****	24.5	*****	135	9	3.2	1.5	.49	***	*****		
33	1000	0	22.8	*****	***	*****	***	***	***	***	***	***	*****		
33	1015	0	22.9	*****	24.5	*****	***	***	***	***	***	***	*****		
33	1030	0	23.0	*****	***	*****	***	***	***	***	***	***	*****		
33	1045	0	23.2	*****	24.5	*****	135	9	4.5	1.0	.52	315	*****		
33	1100	0	23.2	*****	***	*****	***	***	***	***	***	***	*****		
33	1115	0	23.2	*****	24.4	*****	***	***	***	***	***	***	*****		
33	1130	0	23.0	*****	***	*****	***	***	***	***	***	***	*****		
33	1145	0	23.0	*****	24.5	*****	***	***	***	***	***	***	*****		
33	1200	0	23.1	*****	24.7	*****	135	12	5.2	1.5	.68	***	*****		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP	SALNTY	AIR TEMP	RELAT HUMDY	WIND DIR	WIND SPD	SECH VISB	SEA STAT	CURRT	CUR DIR	WATER DEPTH	BOTT NO.	REMARKS
		FT	DEG C	PTS/K	UG C	PERCT	DEG	KN	FT	FT	KN	DEG	FT		
33	1215	0	23.1	*****	***	*****	***	***	***	***	***	***	***		
33	1230	0	23.1	*****	24.3	*****	***	***	***	***	***	***	***		
33	1245	0	23.2	*****	***	*****	***	***	***	***	***	***	***		
33	1300	0	23.2	*****	24.3	*****	135	12	6.0	1.0	4.93	***	***	27	
35	945	0	23.3	*****	25.5	*****	135	2	7.0	.5	.11	315	16.0		
35	1000	0	23.3	*****	25.4	*****	160	2	6.5	.5	.42	315	16.0		
35	1015	0	23.3	*****	25.5	*****	***	***	***	***	***	***	16.0		
35	1030	0	23.4	*****	25.5	*****	***	***	***	***	***	***	16.0		
35	1100	0	23.3	*****	25.5	*****	160	10	7.0	1.0	.49	290	16.0		
35	1200	0	23.2	*****	24.7	*****	115	10	7.5	1.0	*****	***	16.0		
36	1045	0	23.6	*****	25.0	*****	135	***	***	***	***	***	14.0		
36	1100	0	23.6	*****	25.3	74.3	135	8	5.5	1.0	.49	315	15.0		
36	1115	0	23.7	*****	25.3	*****	135	***	***	***	***	***	15.0		
36	1130	0	23.7	*****	***	*****	135	***	***	***	***	***	15.0		
36	1145	0	23.8	*****	***	*****	135	***	***	***	***	***	15.0		
36	1200	0	23.9	*****	26.5	82.3	135	12	6.6	1.5	.68	315	14.0		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME CDT	SAMP DEPH FT	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BUL NO.	REMARKS
37	1100	0	20.4	*****	20.5	*****	160	10	4.5	1.5	.56	225	9.0		
37	1130	0	20.4	*****	20.5	*****	160	10	****	***	****	***	9.0		
37	1200	0	20.4	*****	20.5	*****	160	10	4.5	1.5	.59	225	9.0		
37	1400	0	20.4	*****	***	*****	***	***	***	***	***	***	***	13	
39	1045	0	23.4	*****	***	*****	***	***	***	***	****	***	****		
39	1100	0	23.4	*****	25.5	78.7	180	15	3.5	1.0	.53	120	35.0		
39	1115	0	23.4	*****	***	*****	***	***	***	***	****	***	****		
39	1130	0	23.5	*****	24.9	*****	***	***	***	***	****	***	****		
39	1145	0	23.5	*****	***	*****	***	***	***	***	****	***	****		
39	1200	0	23.5	*****	25.3	78.4	180	5	3.5	1.0	.24	120	****		
39	1215	0	23.5	*****	***	*****	***	***	***	***	****	***	****	4	
40	1041	0	23.6	*****	25.4	*****	180	10	3.0	.5	****	***	****		
40	1100	0	23.5	*****	28.2	*****	160	10	3.0	.5	.68	30	13.0		
40	1115	0	23.5	*****	27.0	*****	***	***	***	***	****	***	****		
40	1130	0	23.5	*****	25.5	*****	***	***	***	***	****	***	****		
40	1145	0	23.5	*****	25.5	*****	***	***	***	***	****	***	****		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP	WATER	SALNTY	AIR	RELAT	WIND	WIND	SECH	SEA	CURRT	CUR	WATER	BUIL	REMARKS
		DEPH	TEMP	PTS/K	TEMP	HUMDY	DIR	SPD	VISB	STAT	KN	DIR	DEPTH	NU.	
	CUT	FT	DEG C		DG C	PERCT	DEG	KN	FT	FT	KN	DEG	FT		
40	1200	0	23.5	*****	25.5	*****	180	5	3.5	.5	.59	25	13.0		
40	1215	0	23.4	*****	24.9	*****	****	**+	***	***	*****	***	*****		
40	1420	0	23.4	*****	24.4	*****	150	15	4.3	1.0	*****	***	*****	3	
41	1000	0	23.7	*****	23.8	82.3	135	10	2.7	1.0	.32	130	9.5		
41	1015	0	23.7	*****	23.8	*****	****	**+	***	***	*****	***	*****		
41	1100	0	23.7	*****	24.7	74.7	135	15	2.7	1.5	.37	125	9.5		CLD COVR 80%
41	1200	0	23.5	*****	25.5	*****	****	**+	***	***	*****	***	*****		
42	1400	0	22.9	*****	24.6	78.7	135	8	3.5	2.0	.37	270	*****		
42	1415	0	22.9	*****	24.6	78.7	135	8	3.5	2.0	.37	270	*****	219	AIRCR NW IMI
43	1051	0	23.4	*****	25.1	74.9	135	8	5.5	1.0	.42	290	*****	24	
43	1305	0	23.4	*****	24.1	86.4	135	10	6.0	2.0	.59	290	*****	23	
44	1100	0	23.0	*****	26.2	71.7	135	5	4.8	.5	.61	300	*****		
44	1220	0	23.0	*****	25.3	64.8	115	8	3.5	1.0	.60	300	*****		
44	1532	0	22.9	*****	24.8	82.3	160	8	4.3	1.0	.29	340	*****	217	AIRCR NW IMI
46	905	0	23.3	*****	23.2	*****	135	5	5.0	1.5	.36	315	19.0		
46	920	0	23.3	*****	23.2	*****	****	**+	***	***	*****	***	*****		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP	WATER	SALNTY	AIR	RELAT	WIND	WIND	SECH	SEA	CURRT	CUR	WATER	BUIL	REMARKS	
		DEPTH	TEMP	PTS/K	TEMP	HUMDY	DIR	SPD	VISB	STAT	FT	KN	DIR	DEPTH	NO.	
	CUT	FT	DEG C		DEG C	PERCT	DEG	KN	FT	FT	KN	DEG	FT			
47	1130	0	23.6	*****	***	*****	***	***	***	***	*****	***	*****			
47	1145	0	23.6	*****	***	*****	***	***	***	***	*****	***	*****			
47	1200	0	*****	*****	***	*****	***	***	9.5	***	*****	***	*****			
47	1300	0	23.5	*****	24.0	74.7	160	***	9.5	***	•23	***	*****	94		
49	840	0	23.0	*****	23.0	*****	135	14	6.0	1.0	•19	310	17.0			
49	855	0	22.8	*****	***	*****	***	***	***	***	*****	***	17.0			
49	901	0	*****	*****	***	*****	***	***	***	***	*****	***	17.0			
49	910	0	23.0	*****	22.9	*****	***	***	***	***	*****	***	17.0			
49	922	0	22.9	*****	***	*****	***	***	***	***	*****	***	17.0			
49	934	0	23.0	*****	22.9	*****	125	15	***	1.0	•31	300	17.0	101		
50	1330	0	23.7	*****	24.9	74.9	135	6	9.5	5.0	*****	***	12.0	104		
51	1405	0	24.0	21.40	24.2	*****	135	6	5.0	***	•56	315	*****	131		
52	1350	0	23.8	22.50	24.1	*****	135	5	4.0	***	•52	270	*****	132		
54	1250	0	23.5	*****	23.9	74.9	110	8	5.0	1.5	•36	350	*****	157		
54	1305	0	23.5	13.80	***	*****	***	***	***	***	*****	***	*****			
54	1305	5	23.7	13.90	***	*****	***	***	***	***	*****	***	*****			

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP	SALNTY	AIR TEMP	RELAT HUMDY	WIND DIR	WIND SPD	SECH VISB	SEA STAT	CURRT	CUR DIR	WATER DEPTH	BOTL NU.	REMARKS
	CDT	FT	DEG C	PTS/K	DG C	PERCT	DEG	KN	FT	FT	KN	DEG	FT		
54	1305	10	23.6	17.50	***	*****	***	***	***	***	***	***	***		
54	1305	15	22.8	26.00	***	*****	***	***	***	***	***	***	***		
54	1305	20	22.5	29.50	***	*****	***	***	***	***	***	***	***		168
54	1315	5	*****	*****	***	*****	***	***	***	***	***	***	***		164
54	1325	0	23.0	*****	23.5	*****	135	18	8.5	2.0	***	***	16.0		162
56	1040	0	*****	*****	***	*****	***	***	***	***	***	***	***		
57	1312	0	25.8	*****	27.2	82.3	90	12	4.0	2.0	.66	***	20.0		73
58	900	5	22.5	*****	***	*****	***	***	***	***	***	***	***		
58	915	0	23.0	*****	23.0	*****	135	4	2.5	.5	***	***	10.0		
58	930	0	24.0	*****	24.0	86.4	***	4	***	1.0	.16	333	*****		
58	1015	0	24.0	*****	24.5	82.3	135	4	3.0	1.0	***	***	10.0		
58	1115	0	24.2	*****	25.0	74.9	135	6	2.0	2.5	.17	315	10.0		
59	1420	0	24.3	19.90	24.7	*****	135	6	3.5	***	.34	270	*****		130
60	1021	0	24.3	*****	24.7	86.3	135	10	1.5	.5	.26	***	*****		96
61	954	0	23.5	*****	23.7	*****	120	13	3.5	***	.63	335	20.0		
61	1009	0	23.5	*****	***	*****	***	***	***	***	***	***	23.0		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BOTL NO.	REMARKS
		CUT FT													
61	1024	0	23.5	*****	22.0	*****	125	15	****	****	****	***	21.0		
61	1039	0	23.7	*****	***	*****	***	***	****	****	****	***	21.0		
61	1054	0	23.6	*****	23.3	*****	118	15	3.0	1.0	.58	335	21.0		
61	1345	0	24.5	*****	22.5	*****	125	12	3.0	1.0	.14	145	8.5		
61	1405	0	24.5	*****	***	*****	***	***	****	****	****	***	*****		
61	1415	0	24.5	*****	22.9	*****	***	***	****	****	****	***	*****		
61	1430	0	24.6	*****	***	*****	***	***	****	****	****	***	*****		
61	1445	0	24.3	*****	22.5	*****	150	15	3.0	1.0	.17	120	*****		
63	1335	0	23.8	*****	26.9	78.9	160	**	2.5	***	****	**	*****	93	
64	1314	0	23.7	*****	26.0	74.3	135	10	2.5	1.0	.24	340	14.0	66	
65	1015	0	23.5	*****	***	*****	***	***	****	****	****	***	*****		
65	1030	0	23.6	*****	25.8	*****	***	***	****	****	****	***	*****		
65	1100	0	23.8	*****	25.6	67.7	135	10	5.5	1.5	.39	315	14.0		
65	1200	0	23.8	*****	26.2	67.3	135	12	5.5	2.0	.41	340	14.0		
66	1335	0	23.7	*****	24.5	*****	135	12	3.5	1.0	.52	***	*****	29	
67	0	0	23.8	18.45	21.9	86.4	180	16	****	2.0	****	***	10.0	197	STRG TIDE E.

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP	WATER	SALNTY	AIR	RELAT	WIND	WIND	SECH	SEA	CURRT	CUR	WATER	BUTL	REMARKS
		DEPTH	TEMP	PTS/K	TEMP	HUMDY	DIR	SPD	VISB	STAT	FT	KN	DIR	DEPTH	NO.
		FT	DEG C		DEG C	PERCT	DEG	KN	FT				DEG	FT	
67	0	5	23.7	18.45	21.9	86.4	180	16	***	2.0	****	***	10.0	201	STRG TIDE E.
67	0	10	23.6	18.35	21.9	86.4	180	16	***	2.0	****	***	10.0	202	STRG TIDE E.
67	100	0	23.6	18.18	21.5	86.3	180	14	***	1.5	****	***	10.0		STRG TIDE E.
67	200	0	23.5	17.72	21.7	86.3	180	10	***	1.5	****	***	10.0		
67	300	0	23.6	17.51	21.7	90.6	180	8	***	1.5	****	***	10.0		
67	400	0	23.7	17.38	21.7	90.6	180	6	***	1.0	****	***	10.0		
67	500	0	23.3	17.15	21.5	90.6	180	6	***	1.0	****	***	10.0		
67	600	0	23.4	17.45	20.9	86.1	140	6	***	1.0	****	***	10.0		
67	700	0	23.4	17.45	21.8	86.3	140	6	***	1.0	****	***	10.0		
67	800	0	23.5	18.00	22.5	90.6	120	6	2.5	1.0	.23	275	10.0	204	
67	800	5	23.3	17.45	22.5	90.6	120	6	***	1.0	****	***	10.0	198	
67	800	10	23.3	17.25	22.5	90.6	120	6	***	1.0	****	***	10.0	203	
67	815	0	23.2	17.34	***	***	***	***	***	***	***	***	***		
67	830	0	23.3	17.45	23.0	***	***	***	***	***	***	***	***		
67	845	0	23.3	17.40	***	***	***	***	***	***	***	***	***		
67	906	0	23.3	17.45	25.0	86.6	130	6	3.0	1.0	.26	270	10.0		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP UG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BUTL NU.	REMARKS
		CDT	FT												
67	915	0	23.3	17.45	***	****	***	***	***	***	***	***	***	***	
67	930	0	23.4	17.45	24.0	****	***	***	***	***	***	***	***	***	
67	945	0	23.3	17.45	***	****	***	***	***	***	***	***	***	***	
67	1000	0	23.3	17.60	24.0	90.6	140	6	3.0	1.0	.32	275	10.0		
67	1015	0	23.3	17.79	***	****	***	***	***	***	***	***	***	***	
67	1030	0	23.4	17.90	25.0	****	***	***	***	***	***	***	***	***	
67	1045	0	23.4	17.90	***	****	***	***	***	***	***	***	***	***	
67	1100	0	23.7	18.15	26.0	82.1	140	6	3.0	1.0	.32	275	10.0		
67	1115	0	23.6	18.17	***	****	***	***	***	***	***	***	***	***	
67	1130	0	23.8	18.20	26.5	****	***	***	***	***	***	***	***	***	
67	1145	0	23.7	18.20	***	****	***	***	***	***	***	***	***	***	
67	1200	0	23.8	18.20	26.0	82.1	120	12	3.0	2.0	.28	275	10.0		100% OVERCAST
67	1215	0	23.5	18.65	***	****	***	***	***	***	***	***	***	***	
67	1230	0	23.5	18.65	25.7	****	***	12	***	***	***	***	***	***	
67	1245	0	23.6	18.67	***	****	***	***	***	***	***	***	***	***	
67	1300	0	23.7	18.65	27.0	82.1	120	12	3.0	1.5	.28	275	10.0	199	

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME CDT	SAMP DEPH FT	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND Spd KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BUIL NU.	REMARKS
67	1300	5	23.8	18.75	27.0	*****	120	12	3.0	1.5	****	***	****	205	
67	1300	10	23.7	18.80	27.0	82.1	120	12	3.0	1.5	****	***	****	206	
67	1315	0	23.8	18.85	***	*****	***	***	***	***	****	***	****		
67	1330	0	23.9	18.80	26.5	*****	***	12	***	***	****	***	****		
67	1345	0	23.9	18.92	***	*****	***	***	***	***	****	***	****		
67	1400	0	23.8	19.10	25.0	82.5	120	10	3.0	1.5	.22	280	10.0		
67	1415	0	23.8	19.00	24.8	*****	***	***	***	***	****	***	****		
67	1430	0	23.9	19.00	24.5	*****	***	***	***	***	****	***	****		
67	1445	0	23.8	19.00	***	*****	***	***	***	***	****	***	****		
67	1500	0	23.9	19.10	24.0	82.1	140	8	3.5	1.5	****	***	****		
67	1515	0	23.8	19.00	***	*****	***	***	***	***	****	***	****		
67	1532	0	23.8	19.00	23.8	82.1	140	8	3.5	1.5	.15	45	10.0	200	NP3A 1MI E.
67	1532	5	23.8	18.55	23.8	82.1	140	8	3.5	1.5	.15	45	10.0	207	
67	1532	10	23.9	17.80	23.8	82.1	140	8	3.5	1.5	.15	45	10.0	208	
67	1800	0	20.3	19.20	23.9	86.6	140	14	***	2.0	****	***	10.0		WATER MUDDY
67	1900	0	23.4	19.40	24.5	82.5	140	14	***	2.0	****	***	10.0		WATER MUDDY

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME CUT	SAMP DEPH FT	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BOTL NO.	REMARKS
67	2000	0	24.0	19.45	23.0	90.7	140	16	****	2.5	****	***	10.0		STRG TIDE E.
67	2100	0	23.8	19.30	22.7	90.7	140	16	****	2.5	****	***	10.0		STRG TIDE E.
67	2200	0	23.8	19.15	22.3	90.7	160	16	****	2.5	****	***	10.0		STRG TIDE E.
67	2300	0	23.9	18.80	22.0	90.7	180	16	****	2.0	****	***	10.0		STRG TIDE E.
69	1315	0	23.7	*****	24.5	86.4	135	18	2.5	1.0	.30	130	11.0		
69	1400	0	23.7	*****	24.5	86.4	135	18	2.5	1.5	.28	170	11.0		
69	1415	0	23.8	*****	24.0	*****	135	18	2.5	1.5	.29	125	11.0	216	ACFT 1/4M NW
70	930	0	23.5	*****	24.3	*****	135	6	3.0	.5	****	***	8.0		
70	945	0	23.5	*****	***	*****	***	***	***	***	****	***	*****		
70	1000	0	23.5	*****	24.5	*****	135	**..	3.0	.5	.25	300	8.0		
70	1030	0	23.5	*****	24.5	*****	***	***	***	***	****	***	*****		
70	1100	0	23.6	*****	24.7	*****	135	**..	3.0	.5	.28	300	8.0		
70	1115	0	23.8	*****	***	*****	***	***	***	***	****	***	*****		
70	1130	0	23.8	*****	24.5	*****	135	**..	***	***	****	***	8.0		
70	1145	0	23.8	*****	***	*****	***	***	***	***	.37	280	*****	211	
70	1200	0	23.8	*****	24.3	*****	135	**..	2.0	1.0	.37	280	8.0		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP	SALNTY	AIR TEMP	RELAT HUMDY	WIND DIR	WIND SPD	SECH VISB	SEA STAT	CURRT	CUR DIR	WATER DEPTH	BUTL NO.	REMARKS
		CDT	FT	DEG C	PTS/K	DG C	PERCT	DEG	KN	FT		DEG	FT		
70	1300	0	24.0	*****	24.3	*****	135	***	2.0	***	.37	280	8.0		
70	1315	0	24.0	*****	***	*****	***	***	***	***	***	***	***		
70	1330	0	24.0	*****	24.3	*****	***	***	***	***	***	***	***		
70	1345	0	24.2	*****	24.0	***	***	10	2.0	***	***	***	***		
70	1400	0	24.2	*****	24.0	*****	135	10	2.0	1.5	***	***	8.0		
70	1415	0	24.0	*****	24.0	***	***	135	10	2.0	1.5	.37	280	8.0	212
71	1230	0	24.0	*****	24.3	*****	135	8	3.0	1.0	.37	340	6.0	213	
72	1400	0	23.5	*****	26.4	78.1	135	10	3.0	2.0	.37	315	*****		
72	1440	0	23.7	*****	23.5	82.1	135	10	3.0	2.0	.40	315	*****	26	FLYOVER
75	1250	0	24.3	*****	24.4	*****	180	4	3.5	.5	***	***	***		73
76	1300	0	24.0	*****	24.5	64.4	135	7	4.0	3.0	.70	345	*****		142
76	1315	0	24.6	*****	***	*****	***	***	***	***	***	***	***		
76	1316	5	24.2	*****	***	*****	***	***	***	***	***	***	***		148
76	1317	10	23.5	*****	***	*****	***	***	***	***	***	***	***		
76	1318	15	22.5	*****	***	*****	***	***	***	***	***	***	***		
76	1320	0	24.0	*****	23.0	***	135	7	***	3.0	***	***	15.0		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIK DEG	WATER DEPTH FT	BOTL NU.	REMARKS
	CUT	FT													
76	1400	0	24.3	*****	24.0	68.0	135	7	3.0	3.0	.25	350	*****	141	
76	1402	5	*****	*****	***	*****	***	***	***	***	***	***	*****	147	
76	1405	0	24.2	*****	***	*****	***	***	***	***	***	***	*****		
76	1406	5	24.0	*****	***	*****	***	***	***	***	***	***	*****		
76	1407	10	23.5	*****	***	*****	***	***	***	***	***	***	*****		
76	1408	15	22.5	*****	***	*****	***	***	***	***	***	***	*****		
76	9999	10	*****	*****	***	*****	***	***	***	***	***	***	*****	145	
78	920	0	22.7	*****	21.5	*****	315	5	3.0	.5	.41	270	13.0		
78	955	0	22.7	*****	22.5	*****	315	5	3.0	.5	.41	270	13.0		
78	1100	0	22.9	*****	22.8	*****	***	5	3.0	.5	.41	315	13.0		
78	1200	0	23.2	*****	24.0	*****	***	12	3.0	1.0	.47	***	13.0		
79	845	0	22.9	*****	21.0	*****	135	8	2.5	.5	.23	158	8.0		
79	915	0	22.8	*****	21.8	*****	135	5	2.5	.5	.23	158	8.0		
79	1015	0	25.4	*****	24.6	*****	135	7	2.5	1.0	.23	158	8.0		
79	1100	0	25.8	*****	25.0	*****	180	9	2.5	2.0	.23	202	8.0		
79	1200	0	25.9	*****	25.2	*****	200	15	2.5	2.5	.23	202	8.0	189	

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME CDT	SAMP DEPH FT	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BOTL NO.	REMARKS
82	1245	3	23.6	*****	27.5	71.1	135	12	3.5	1.5	.54	330	15.0	176	FLYOVER
82	1246	5	*****	*****	***	*****	***	***	***	***	***	***	*****	179	
82	1247	10	*****	*****	***	*****	***	***	***	***	***	***	*****	182	
83	1245	0	23.7	*****	23.6	*****	***	12	3.0	2.0	.54	***	15.0	185	
84	1320	0	25.5	*****	24.2	*****	180	18	2.5	4.0	.56	224	19.0	188	
85	1310	0	24.0	*****	***	*****	340	10	2.0	1.5	.41	315	8.0	184	
86	1315	0	*****	*****	27.6	78.7	135	12	3.0	1.0	.44	***	*****	175	
86	1316	5	*****	*****	***	*****	***	***	***	***	***	***	*****	181	
87	900	0	23.2	*****	23.0	86.3	135	8	2.5	.5	.26	330	*****		
87	915	0	23.2	*****	***	*****	***	***	***	***	***	***	*****		
87	930	0	23.3	*****	23.0	*****	***	***	***	***	***	***	*****		
87	945	0	23.3	*****	***	*****	***	***	***	***	***	***	*****		
87	1000	0	23.0	*****	24.5	86.4	135	10	2.5	.5	.44	330	*****		
87	1015	0	23.5	*****	***	*****	***	***	***	***	***	***	*****		
87	1030	0	23.5	*****	26.3	*****	***	***	***	***	***	***	*****		
87	1100	0	23.6	*****	24.1	78.4	135	12	2.0	.5	.44	330	*****		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BOTL NU.	REMARKS
	CUT	FT													
87	1200	0	23.7	*****	25.0	*****	****	**.0	***	***	****	***	****		
88	1305	0	23.6	*****	23.9	*****	135	***	3.0	3.5	.30	20	****	117	MISSD FLYVR
89	1250	0	23.0	30.90	25.5	*****	135	12	8.0	3.0	.74	135	44.0		
90	1145	0	24.0	21.70	25.4	*****	150	5	***	.2	****	***	5.0		
90	1200	0	24.0	21.40	25.9	64.4	150	6	1.8	.2	.56	150	5.0		
90	1215	0	24.0	21.40	25.6	*****	150	5	***	.2	****	***	5.0		
90	1230	0	24.1	21.40	26.0	*****	150	4	***	.2	****	***	5.0		
90	1245	0	24.0	21.40	25.7	*****	180	5	***	.2	****	***	5.0		
90	1300	0	24.0	21.60	26.5	67.7	180	6	2.0	.3	.47	180	5.0		
90	1315	0	24.0	21.60	26.5	*****	180	5	***	.3	****	***	5.0		
90	1330	0	24.0	21.60	25.5	*****	180	6	***	.3	****	***	5.0		
90	1345	0	24.1	21.60	25.5	*****	180	5	***	.3	****	***	5.0		
90	1400	0	24.2	21.60	25.4	43.1	180	7	2.3	.2	.44	180	5.0		
90	1415	0	24.1	21.60	25.0	*****	180	5	***	.3	****	***	5.0		
90	1427	0	24.1	21.60	24.3	43.1	180	7	2.0	.3	.36	180	5.0	35	
90	1445	0	24.2	21.60	23.4	*****	180	6	***	.3	****	***	5.0		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISb FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BOTL NU.	REMARKS
	CDT	FT													
90	1500	0	24.1	21.60	23.9	47.8	185	8	2.5	.3	.23	185	5.0		
90	1520	0	24.4	21.60	24.0	47.8	185	8	2.5	.3	.17	185	5.0	34	AIRCR 5M SE
91	1400	0	25.1	*****	24.6	*****	150	***	***	***	.29	330	7.0		
91	1415	0	*****	*****	***	*****	150	8	2.0	***	****	***	7.0		
91	1425	0	*****	16.90	***	*****	***	***	***	***	****	***	7.0		
91	1425	6	*****	18.50	***	*****	***	***	***	***	****	***	7.0		
91	1430	0	25.1	*****	24.5	*****	150	12	***	1.0	****	***	7.0		
91	1445	0	25.0	17.20	***	*****	***	***	***	***	****	***	7.0		
91	1500	0	25.0	17.30	24.6	*****	150	18	2.0	1.0	****	***	7.0		
91	1513	0	25.0	17.40	24.5	*****	150	16	2.0	1.0	.30	330	7.0	49	FLYOVER
92	1330	0	24.5	24.10	24.8	*****	120	8	4.0	1.5	.59	330	8.0		
92	1345	0	24.5	*****	***	*****	***	***	***	***	****	***	8.0		
92	1400	0	24.5	*****	24.2	*****	***	***	***	***	****	***	8.0		
92	1415	0	24.5	*****	***	*****	***	***	***	***	****	***	8.0		
92	1430	0	24.5	24.10	24.6	*****	135	10	4.0	1.5	.56	320	8.0		
92	1445	0	24.5	*****	***	*****	***	***	***	***	****	***	8.0		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH FT	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP UG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BUTL NO.	REMARKS
	CUT														
92	1500	0	24.5	*****	***	*****	***	***	***	***	***	***	8.0		
92	1513	0	24.5	23.90	24.6	*****	135	10	4.0	1.5	.56	320	8.0	37	FLYOVER
92	1530	0	24.5	*****	***	*****	***	***	***	***	***	***	*****		
93	1230	0	18.9	1.90	25.1	*****	***	***	***	***	***	***	*****		
93	1245	0	18.9	1.70	***	*****	***	***	***	***	***	***	*****		
93	1300	0	18.9	2.00	23.8	*****	160	3	.5	.5	1.64	110	*****		
93	1315	0	18.9	2.00	***	*****	***	***	***	***	***	***	*****		
93	1330	0	18.8	2.00	22.3	*****	***	***	***	***	***	***	*****		
93	1345	0	18.7	1.90	***	*****	***	***	***	***	***	***	*****		
93	1400	0	18.7	1.90	21.9	*****	160	3	.5	.5	1.71	110	*****		
93	1415	0	18.7	1.80	***	*****	***	***	***	***	***	***	*****		
93	1430	0	18.8	1.80	21.1	*****	***	***	***	***	***	***	*****		
93	1445	0	18.7	1.70	***	*****	***	***	***	***	***	***	*****		
93	1508	0	18.5	1.70	21.0	*****	160	3	.5	.5	1.53	110	*****	39	AIRCR +5MI N
94	1250	0	24.7	16.10	28.2	*****	140	15	5.0	5.0	.29	320	20.0		
94	1305	0	24.7	15.80	***	*****	***	***	***	***	***	***	*****		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STA NUMb	TIME	SAMP DEPH	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDy PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BUTL NO.	REMARKS
	CUT	FT													
94	1320	0	24.6	15.80	29.5	*****	***	***	***	***	***	***	***		
94	1335	0	24.6	16.20	***	*****	***	***	***	***	***	***	***		
94	1350	0	24.6	16.50	29.1	*****	135	16	5.0	6.5	.35	315	*****		
94	1405	0	24.5	16.40	***	*****	***	***	***	***	***	***	***		
94	1420	0	24.6	16.30	29.8	*****	***	***	***	***	***	***	***		
94	1435	0	24.6	16.20	***	*****	***	***	***	***	***	***	***		
94	1450	0	24.6	16.50	28.3	*****	135	16	5.0	7.0	.37	315	*****		
94	1504	0	24.6	16.30	28.3	*****	135	16	5.0	7.0	.37	315	20.0	40	AIRCR OVERHD
95	1230	0	23.9	*****	24.3	***	***	***	***	***	***	***	***		
95	1300	0	23.9	*****	24.5	82.5	160	7	4.0	1.0	.89	160	*****		
95	1315	0	23.8	*****	***	***	***	***	***	***	***	***	***		
95	1330	0	23.5	*****	24.2	95.6	160	7	3.5	1.0	.89	160	*****	31	FLYOVER
95	1342	0	23.5	*****	24.2	***	***	***	***	***	***	***	***		
96	1300	0	23.9	1.20	28.9	*****	135	8	1.0	3.0	.39	110	*****		
96	1315	0	23.9	*****	25.3	***	135	8	***	3.0	.39	110	*****		
96	1330	0	24.0	1.10	***	***	135	8	1.0	3.0	.39	110	*****		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BUL NU.	REMARKS
	CUT	FT													
96	1345	0	24.0	*****	26.3	*****	135	8	****	3.0	.39	110	*****		
96	1400	0	23.9	1.20	26.1	*****	135	8	1.0	3.0	.39	110	*****		
96	1415	0	24.0	*****	25.8	*****	135	8	1.0	3.0	.39	110	*****		
96	1430	0	23.9	1.40	26.2	*****	135	8	1.0	3.0	.39	110	*****		
96	1445	0	23.7	*****	25.9	*****	135	8	1.0	3.0	.39	110	*****		
96	1550	0	23.7	1.30	25.2	*****	135	8	1.0	3.0	.39	110	*****		OVERFLIGHT
97	1230	0	19.3	.30	23.9	*****	135	8	.8	*****	*****	200	11.0		
97	1245	0	19.1	.30	23.8	*****	135	8	*****	*****	*****	***	*****		
97	1300	0	19.0	.30	23.8	*****	130	8	.8	.5	.85	200	11.0		
97	1315	0	19.0	.30	23.8	*****	130	8	*****	*****	*****	***	*****		
97	1330	0	19.0	.30	24.3	*****	130	8	*****	*****	*****	***	*****		
97	1345	0	19.0	.30	24.3	*****	130	8	*****	*****	*****	***	*****		
97	1400	0	19.0	.30	25.3	*****	180	6	.8	.3	*****	200	11.0	42	
97	1415	0	19.0	.30	24.9	*****	180	6	*****	*****	*****	***	*****		
97	1430	0	19.2	.30	24.4	*****	180	6	*****	*****	*****	***	*****		
97	1445	0	19.2	.30	24.5	*****	180	6	.8	.3	*****	200	11.0	43	FLYOVER

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISH FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BUIL NO.	REMARKS
	CDT	FT													
97	1500	0	19.3	.30	24.2	*****	180	8	.8	.4	*****	200	11.0		
97	1515	0	19.3	.30	24.4	*****	180	8	.8	.4	*****	200	11.0	44	
98	1300	0	18.5	*****	***	*****	90	8	.5	***	*****	***	*****		
98	1315	0	18.6	*****	***	*****	90	8	.5	***	*****	***	*****		
98	1330	0	18.5	*****	23.2	*****	90	8	.5	***	*****	***	*****		
98	1345	0	18.6	*****	***	*****	90	8	.5	***	*****	***	*****		
98	1400	0	18.6	*****	22.2	*****	90	8	.5	***	*****	***	*****		
98	1415	0	18.6	*****	***	*****	90	8	.5	***	*****	***	*****		
98	1430	0	18.6	*****	22.5	*****	90	8	.5	***	*****	***	*****		
98	1443	0	*****	*****	***	*****	***	***	***	***	*****	***	*****	96	
98	1443	0	18.9	*****	22.5	*****	90	8	.5	***	*****	***	*****	45	FLYOVER
98	1443	0	*****	*****	***	*****	***	***	***	***	*****	***	*****	47	
100	1130	0	24.3	18.60	29.0	*****	135	10	***	2.0	*****	***	15.0		
100	1145	0	24.3	18.50	***	*****	***	***	***	***	*****	***	*****		
100	1200	0	24.3	18.50	26.7	71.1	***	***	4.0	2.0	.63	***	15.0		
100	1215	0	24.4	18.30	***	*****	***	***	***	***	*****	***	*****		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME CDT	SAMP DEPH FT	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BOTL NO.	REMARKS
100	1230	0	24.5	18.30	27.6	*****	135	10	*****	*****	*****	***	*****		
100	1245	0	24.4	18.20	***	*****	***	***	***	***	*****	***	*****		
100	1300	0	24.6	18.20	27.0	71.4	***	***	4.0	2.0	.47	***	15.0		
100	1315	0	24.5	18.20	***	*****	***	***	***	***	*****	***	*****		
100	1330	0	24.7	18.10	28.0	*****	135	***	***	2.5	*****	***	*****		
100	1345	0	24.7	18.10	***	*****	***	***	***	***	*****	***	*****		
100	1400	0	24.7	18.30	27.0	71.1	***	***	4.0	***	.45	***	15.0		
100	1434	0	24.6	18.20	28.0	71.1	135	10	4.0	2.0	.44	***	15.0	36	
101	1345	0	24.5	*****	***	*****	***	***	***	***	*****	***	7.0		OVERCAST
101	1400	0	24.6	26.00	26.5	*****	135	6	2.0	1.0	.14	261	7.0		
101	1415	0	24.6	*****	***	*****	***	***	***	***	*****	***	*****		
101	1429	0	24.5	26.00	26.5	*****	135	6	2.0	1.5	.15	310	7.0	33	AIRC. OVERHI
102	1315	0	23.5	*****	24.3	*****	150	5	3.8	.5	.07	270	9.5		
102	1345	0	23.6	*****	***	*****	***	***	***	***	*****	***	*****		
102	1355	0	23.6	*****	24.5	*****	150	10	4.0	1.0	***	***	9.5	2	
103	945	0	22.8	27.60	24.6	*****	135	5	7.0	***	*****	***	*****		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BUTL NU.	REMARKS
	COT	FT													
103	1000	0	22.8	28.00	26.0	*****	135	5	5.5	****	.89	315	*****	136	
103	1015	0	22.3	27.50	25.5	*****	135	5	****	****	***	***	*****		
104	1405	0	24.7	*****	24.5	71.4	135	6	9.5	5.0	****	***	8.0	105	
105	1043	0	23.4	15.30	23.7	*****	125	8	****	1.5	.99	***	*****	139	
105	1044	5	23.4	15.30	***	*****	***	***	2.5	***	****	***	*****		
105	1045	10	23.1	16.00	***	*****	***	***	***	***	***	***	*****		
106	917	0	23.3	*****	23.8	82.5	***	***	3.8	1.0	*****	***	*****		
106	930	0	23.4	*****	***	*****	160	10	***	***	****	***	*****		
106	945	0	23.5	*****	22.6	*****	160	10	3.8	1.0	*****	***	*****	32	
107	1015	0	24.0	*****	24.3	74.9	160	7	3.8	1.0	.99	180	*****		
107	1030	0	24.0	*****	***	*****	***	***	***	***	****	***	*****		
107	1115	0	*****	*****	***	53.8	160	7	3.3	1.0	.89	160	*****		
108	1300	0	23.5	23.50	22.8	*****	135	10	5.5	4.0	.36	290	*****	62	
109	1010	0	22.8	23.00	22.5	81.9	110	6	9.0	1.0	****	***	*****	140	
107	1010	5	22.6	23.00	***	*****	***	***	***	***	****	***	*****		
109	1025	0	23.0	*****	***	*****	***	***	***	***	****	***	*****		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP DEPH	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DEG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BUIL NU.	REMARKS
		FT			DEG C										
109	1100	0	23.3	24.60	25.2	70.4	135	6	9.0	1.0	****	***	*****		
109	1100	5	22.9	28.50	***	****	***	***	***	***	****	***	*****		
110	945	0	23.0	*****	23.9	****	***	***	3.5	.8	.24	20	8.5		
110	1000	0	23.0	*****	23.9	****	***	***	3.5	.8	.25	20	8.5		
110	1015	0	23.1	*****	23.7	****	***	***	3.5	1.0	.49	20	8.5		
111	1003	0	23.0	22.10	24.0	****	120	6	5.5	4.0	****	***	*****	137	FLYOVER 1000
111	1004	5	23.2	24.20	***	****	***	***	***	***	****	***	*****		
111	1005	10	22.9	29.40	***	****	***	***	***	***	****	***	*****		
111	1006	15	22.8	29.60	***	****	***	***	***	***	****	***	*****		
111	1007	20	22.8	29.60	***	****	***	***	***	***	****	***	*****		
112	1015	0	21.8	*****	25.1	****	180	10	****	.3	2.34	90	10.0		
113	1315	0	23.4	*****	24.5	****	135	12	3.5	1.0	.56	***	*****	28	
114	1115	0	24.3	*****	25.7	****	135	77	2.0	.5	.37	305	5.0		
114	1145	0	24.2	*****	26.2	****	135	7	2.0	.5	.37	305	5.0		
114	1200	0	*****	*****	***	****	135	7	2.0	.5	****	***	*****		
114	1220	0	*****	*****	***	****	135	7	2.0	.5	.37	305	5.0		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB E	TIME CDT	SAMP DEPH FT	WATER TEMP DEG C	SALNTY PTS/K	AIR TEMP DG C	RELAT HUMDY PERCT	WIND DIR DEG	WIND SPD KN	SECH VISB FT	SEA STAT FT	CURRT KN	CUR DIR DEG	WATER DEPTH FT	BUIL NU.	REMARKS
114	1245	0	*****	*****	***	****	135	7	20	.5	.37	305	50		
114	1312	0	*****	*****	***	****	135	7	20	.5	.47	305	50	100	Fly over
115	1330	0	24.0	*****	23.3	*****	135	7	30	4.0	****	***	*****	144	
115	1335	0	24.5	*****	***	****	***	***	***	***	****	***	*****		
115	1336	5	24.5	*****	***	****	***	***	***	***	****	***	*****		
115	1337	10	23.0	*****	***	****	***	***	***	***	****	***	*****		
115	1338	15	22.8	*****	***	****	***	***	***	***	****	***	*****		
118	1030	0	23.6	*****	22.7	70.7	180	5	9.0	1.0	.49	180	80		
118	1045	0	23.7	*****	23.8	****	***	***	***	***	****	***	*****		
118	1055	0	*****	*****	***	****	***	***	***	***	****	***	*****	8	
119	1115	0	23.7	*****	22.8	70.7	180	5	9.0	1.0	****	***	11.0	9	
120	1130	0	23.7	*****	23.5	70.7	180	5	3.5	1.0	****	***	10.0	10	
121	1150	0	23.7	*****	23.0	70.7	180	10	3.5	1.0	****	***	13.0	11	
122	915	0	22.9	*****	24.4	****	180	6	2.5	***	.09	180	*****		
122	930	0	23.0	*****	***	****	180	***	***	***	****	***	*****		
122	1015	0	23.2	*****	25.7	****	180	8	2.5	***	.09	180	*****		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUMB	TIME	SAMP	WATER	SALNTY	AIR	RELAT	WIND	WIND	SECH	SEA	CURRT	CUR	WATER	BUIL	REMARKS
		DEPH	TEMP	PTS/K	TEMP	HUMDY	DIR	SPD	VISB	STAT	FT	KN	DIR	DEPTH	NU.
		FT	DEG C		DEG C	PERCT	DEG	KN	FT	FT	KN	DEG	FT		
122	1030	0	23.2	*****	***	*****	***	***	***	***	***	***	***	*****	
122	1045	0	23.2	*****	23.9	*****	***	***	***	***	***	***	***	*****	
122	1100	0	23.2	*****	24.6	*****	***	***	***	***	***	***	***	*****	
122	1115	0	23.6	*****	25.5	*****	180	8	3.0	***	0.8	180	*****		
122	1130	0	23.6	*****	24.6	*****	180	***	***	***	***	***	***	*****	
122	1145	0	23.6	*****	25.0	*****	180	8	***	***	***	***	***	*****	
122	1200	0	23.8	*****	25.0	*****	180	9	3.0	***	0.14	***	*****	195	
123	915	0	23.1	*****	***	*****	180	4	2.5	***	0.21	***	*****		
123	930	0	23.2	*****	24.7	*****	***	***	***	***	***	***	***	*****	
123	945	0	23.1	*****	***	*****	***	***	***	***	***	***	***	*****	
123	1000	0	23.1	*****	24.2	*****	***	***	***	***	***	***	***	*****	
123	1015	0	23.2	*****	***	*****	135	4	3.0	***	0.32	***	*****		
123	1030	0	23.2	*****	24.5	*****	***	***	***	***	***	***	***	*****	
123	1045	0	23.3	*****	***	*****	***	***	***	***	***	***	***	*****	
123	1100	0	23.3	*****	24.6	*****	***	***	2.5	***	***	***	***	*****	
123	1115	0	23.3	*****	***	*****	135	10	3.0	***	0.20	***	*****		

TABLE 12
MISSISSIPPI SOUND IV
SURFACE DATA COLLECTION STATION MEASUREMENTS

STAT NUM	TIME	SAMP LEPH	WATER TEMP	SALNTY	AIR TEMP	RELAT HUMDY	WIND DIR	WIND SPD	SECH	SEA STAT	CURRT	CUR DIR	WATER DEPTH	BUIL NU.	REMARKS
123	1130	C	23.4	*****	24.6	*****	***	***	***	***	*****	***	***		
123	1200	C	23.5	*****	24.4	*****	***	***	***	***	*****	***	***		
123	1212	C	23.5	*****	***	*****	135	12	3.0	***	.32	***	***	191	
124	1300	C	24.2	*****	25.2	*****	135	10	3.0	***	.73	***	***	194	
125	1300	C	*****	*****	***	*****	***	***	***	***	*****	***	***	192	
126	1345	C	24.3	*****	24.5	*****	135	11	2.5	***	.81	***	***	196	OIL ON WATER
127	1330	C	*****	*****	***	*****	***	***	***	***	*****	***	***	193	

TABLE 13
MISSISSIPPI SOUND IV
SURFACE DATA STATION LABORATORY MEASUREMENTS

STA NUM	TIME CDT	SAMP DPTH FT	SALIN *1 PTS/K	SALIN *2 PTS/K	LGHT TRAN PERC	TURB NEPH UNIT	PH UNIT	CL PTS/K	NA	K	PO4 MG/L	N03 MG/L	MG MN/L	FE MG/L	CA MG/L	SUSP SOLID MG/L	TOTAL SOLID MG/L	CHLO PH A M/M3
0	1414	0	1.22	.13	98	50	9.1	.06	50	2	.01	.18	***	2.54	20	31	360	4.9
2	1347	0	8.99	8.11	99	18	7.2	4.48	2500	90	.02	.00	36	.46	12	12	10200	5.4
3	947	0	11.03	****	***	***	***	***	***	***	***	***	***	***	***	***	****	3.7
3	947	0	10.73	10.43	97	72	7.5	5.76	3210	115	.01	.00	420	.46	120	58	14300	3.3
3	1330	0	10.60	9.79	99	16	7.1	5.41	3020	108	.02	.00	385	.31	110	13	13500	6.7
4	945	0	16.82	15.99	99	20	7.4	8.84	4920	177	.01	.00	710	.18	205	28	21200	3.1
4	1342	0	17.01	16.22	98	38	7.6	8.97	4990	180	.01	.00	735	.14	210	41	24000	3.1
5	1010	0	18.76	18.60	98	20	7.4	10.29	5730	206	.02	.00	875	.33	250	18	26000	3.5
5	1300	0	19.15	18.67	99	14	7.8	10.33	5750	207	.02	.00	910	.28	265	19	27000	1.9
5	1340	0	19.94	18.84	99	16	7.8	10.42	5800	209	.02	.00	1170	.28	335	11	25500	1.9
5	1420	0	19.62	19.00	99	12	7.8	10.51	5850	211	.02	.00	915	.21	260	11	27000	2.6
6	950	0	25.15	24.16	97	50	7.8	13.37	7440	268	.01	.00	920	.21	270	36	34000	1.4
6	1338	0	25.10	23.93	98	42	7.8	13.24	7370	265	.01	.00	988	.26	280	19	35000	1.8
6	1528	0	25.26	24.23	98	36	7.9	13.41	7460	268	.01	.00	1075	.22	310	31	35000	1.7
7	1315	0	11.41	****	***	***	***	***	***	***	***	***	***	***	***	***	****	***
8	1255	0	24.41	23.53	99	15	7.9	13.02	7250	261	.02	.00	905	.17	262	5	32300	1.9

1 SALINOMETER MEASUREMENT

2 TITRATION MEASUREMENT

TABLE 13
MISSISSIPPI SOUND IV
SURFACE DATA STATION LABORATORY MEASUREMENTS

STA NUM	TIME CDT	SAMP DPTH FT	SALIN •1 PTS/K	SALIN •2 PTS/K	LGHT TRAN PERC	TURB NEPH UNIT	PH UNIT	CL PTS/K	NA	K	PO4 PTS/K	N03	MG MG/L	FE MG/L	CA MG/L	SUSP SOLID MG/L	TOTAL SOLID MG/L	CHLO PH A M/M3
8	1328	0	24.23	23.53	98	35	7.9	13.02	7250	261	•02	•00	910	.42	258	24	33000	2.0
9	1000	0	26.72	24.88	99	11	8.0	13.77	7660	276	•01	•00	1150	.29	325	9	39500	1.3
10	844	0	33.02	31.31	99	19	8.0	17.33	9650	347	•01	•00	1200	.40	342	14	37800	1.6
11	922	0	31.45	30.19	99	18	8.0	16.71	9300	335	•02	•00	1160	.26	332	8	41300	1.0
13	1030	0	26.67	25.51	98	28	8.1	14.12	7860	283	•02	•00	1070	.26	330	18	40000	1.7
13	1300	0	26.27	25.66	98	26	8.0	14.20	7900	285	•01	•00	1150	.38	325	28	34500	1.5
16	958	0	30.19	29.72	96	68	8.0	16.45	9150	329	•01	•00	1140	.18	325	54	42500	7.1
16	1300	0	29.70	28.84	93	82	7.9	15.96	8880	320	•02	•00	1110	.48	310	52	39000	3.1
17	1005	0	18.11	17.48	98	31	7.9	9.67	5380	194	•01	•00	670	.72	190	25	26000	3.9
17	1015	5	28.14	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	2.7
17	1016	10	30.89	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	3.9
20	1150	0	14.18	12.88	99	12	7.6	7.12	3970	143	•01	•00	645	.48	185	8	17300	9.1
20	1155	5	15.03	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	6.3
20	1155	10	24.28	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	11.1
21	1300	0	25.28	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	2.5
22	1028	0	15.45	14.31	98	25	7.9	7.91	4410	159	•01	•00	550	.25	160	26	20000	2.9

1 SALINOMETER MEASUREMENT

2 TITRATION MEASUREMENT

TABLE 13
MISSISSIPPI SOUND IV
SURFACE DATA STATION LABORATORY MEASUREMENTS

STA NUM	TIME CDT	SAMP DPTH FT	SALIN *1 PTS/K	SALIN *2 PTS/K	LIGHT TRAN PERC	TURB NEPH UNIT	PH UNIT	CL PTS/K	NA PTS/K	K MG/L	PO4 MG/L	N03 MN/L	MG MG/L	FE MG/L	CA MG/L	SUSP SOLD MG/L	TOTAL SOLID MG/L	CHLO PH A M/M3
24	945	0	25.37	24.33	99	24	7.8	13.46	7490	270	.01	.00	935	.18	270	18	31300	3.0
24	945	5	25.76	*****	***	***	***	***	***	***	***	***	***	***	***	***	*****	***
26	1315	0	29.63	27.41	98	33	8.0	15.17	8440	304	.01	.00	1250	.14	355	27	40000	.2
27	1300	0	24.32	23.53	99	14	7.9	13.02	7250	261	.02	.00	905	.23	260	16	31000	1.9
28	950	0	28.27	27.34	99	21	8.1	15.13	8420	303	.02	.00	1050	.22	293	9	37500	1.1
31	1300	0	27.24	25.42	98	35	7.8	14.07	7830	282	.01	.00	990	.32	280	21	33000	.1
31	1315	0	26.08	25.36	98	34	8.0	14.05	7810	281	.02	.00	1000	.33	265	22	33100	1.8
31	1351	0	26.42	*****	***	***	***	***	***	***	***	***	***	***	***	***	*****	***
32	1300	0	26.30	*****	***	***	***	***	***	***	***	***	***	***	***	***	*****	***
33	1300	0	*****	25.11	98	17	7.8	13.90	7730	278	.02	.00	1113	.28	315	14	36000	4.1
37	1400	0	17.14	16.14	99	25	7.6	8.93	4970	179	.02	.00	685	.27	195	24	23200	3.5
39	1215	0	7.68	7.18	98	24	7.3	3.96	2210	80	.02	.00	390	.34	115	14	9500	6.8
40	1420	0	*****	6.29	98	19	7.6	3.47	1940	70	.02	.00	288	.42	85	18	8300	10.4
42	1415	0	19.13	18.35	99	21	7.7	10.15	5650	203	.01	.00	1038	.31	295	14	25500	3.5
43	1051	0	21.53	20.51	98	27	7.8	11.35	6320	227	.01	.00	995	.19	285	23	31400	2.1
43	1305	0	21.81	21.15	98	34	7.7	11.70	6510	234	.02	.00	900	.27	255	18	29500	2.3

1 SALINOMETER MEASUREMENT

2 TITRATION MEASUREMENT

TABLE 13
MISSISSIPPI SOUND IV
SURFACE DATA STATION LABORATORY MEASUREMENTS

STA NUM	TIME CDT	SAMP DPTH FT	SALIN #1 PTS/K	SALIN #2 PTS/K	LIGHT TRAN PERC	TURB NEPH UNIT	PH UNIT	CL PTS/K	NA	K PTS/K	PO4 MG/L	N03 MN/L	MG MG/L	FE MG/L	CA MG/L	SUSP SOLID MG/L	TOTAL SOLID MG/L	CHLO PH A M/M3
44	1532	0	21.53	20.66	99	22	7.9	11.43	6360	229	.01	.00	990	.23	280	26	27500	3.1
46	1200	0	27.79	26.45	98	22	8.0	14.64	8150	293	.01	.00	1020	.31	291	21	36000	1.6
46	1200	15	27.48	****	****	****	****	****	****	****	****	****	****	****	****	****	****	
47	1300	0	24.82	23.44	98	31	7.9	12.97	7220	260	.02	.00	900	.23	256	19	35500	2.2
49	934	0	24.84	****	****	****	****	****	****	****	****	****	****	****	****	****	1.4	
50	1330	0	24.52	22.48	99	31	7.9	12.44	6920	250	.01	.00	860	.19	250	17	30500	3.1
51	1405	0	****	21.22	99	15	7.9	11.74	6530	235	.01	.00	905	.33	260	22	29200	****
52	1350	0	23.66	22.65	99	14	7.9	12.53	6980	252	.01	.00	955	.14	275	6	30200	4.0
54	1250	0	13.82	12.57	99	13	7.8	6.95	3870	139	.02	.00	575	.36	165	12	17500	2.4
54	1315	5	13.96	****	****	****	****	****	****	****	****	****	****	****	****	****	2.6	
54	1315	15	28.47	****	****	****	****	****	****	****	****	****	****	****	****	****	2.5	
54	1325	0	19.90	19.16	99	13	7.9	10.60	6040	212	.02	.00	730	.29	210	9	2500	3.5
57	1312	0	12.10	11.45	98	29	7.7	6.33	3530	127	.01	.00	440	.36	125	22	15300	4.6
58	915	5	14.39	****	****	****	****	****	****	****	****	****	****	****	****	****	3.0	
58	1225	0	14.31	13.48	98	32	7.8	7.45	4150	149	.01	.00	520	.46	150	27	19500	4.7
59	1415	0	20.93	19.88	98	26	7.8	11.00	6120	220	.01	.00	900	.19	260	39	29500	4.7

1 SALINOMETER MEASUREMENT

2 TITRATION MEASUREMENT

TABLE 13
MISSISSIPPI SOUND IV
SURFACE DATA STATION LABORATORY MEASUREMENTS

STA NUM	TIME CDT	SAMP	SALIN *1	SALIN *2	LIGHT	TURB	PH	CL	NA	K	PO4	NO3	MG	FE	CA	SUSP	TOTAL	CHLO
		DEPTH FT	PTS/K	PTS/K	TRAN PERC	NEPH UNIT	UNIT	PTS/K	PTS/K	MG/L	MG/L	MN/L	MG/L	MG/L	MG/L	SOLID MG/L	SOLID MG/L	PH A M/M3
60	1021	0	20.54	19.23	97	58	7.7	10.64	5920	213	.01	.00	740	.38	210	43	25000	18.5
61	954	0	19.35	18.04	95	54	7.6	9.98	5560	200	.01	.00	775	.23	220	46	24800	14.4
63	1335	0	24.71	23.30	98	28	8.1	12.89	7180	258	.01	.00	900	.36	266	20	31500	2.4
64	1314	0	27.79	26.15	98	40	7.8	14.47	8060	290	.01	.00	1000	.26	284	35	36700	5.5
66	1335	0	20.05	19.07	98	32	7.8	10.55	5870	211	.01	.00	915	.20	260	34	29000	6.4
67	0	0	****	17.34	84	220	7.7	9.59	5340	192	.01	.00	670	.52	190	102	26500	5.7
67	0	5	18.52	****	****	****	****	****	****	****	****	****	****	****	****	****	****	4.4
67	0	10	18.57	****	****	****	****	****	****	****	****	****	****	****	****	****	****	5.3
67	800	0	17.08	16.45	91	88	7.6	9.10	5070	182	.02	.00	950	.26	270	73	22500	5.9
67	800	5	17.28	****	****	****	****	****	****	****	****	****	****	****	****	****	****	5.0
67	800	10	17.46	****	****	****	****	****	****	****	****	****	****	****	****	****	****	4.6
67	1300	0	18.37	17.50	96	64	7.8	9.68	5390	194	.02	.00	730	.40	205	54	22500	4.3
67	1300	5	18.61	****	****	****	****	****	****	****	****	****	****	****	****	****	****	1.7
67	1300	10	18.31	****	****	****	****	****	****	****	****	****	****	****	****	****	****	3.5
67	1532	0	18.62	18.13	97	55	7.8	10.03	5590	202	.01	.00	745	.34	215	41	25800	6.5
67	1532	5	18.56	****	****	****	****	****	****	****	****	****	****	****	****	****	****	8.1

1 SALINOMETER MEASUREMENT

2 TITRATION MEASUREMENT

TABLE 13
MISSISSIPPI SOUND IV
SURFACE DATA STATION LABORATORY MEASUREMENTS

STA NUM	TIME CDT	SAMP DPTH FT	SALIN #1	SALIN #2	LGHt TRAN	TURB NEPH	PH	CL	NA	K	P04	N03	MG	FE	CA	SUSP SOLU	TOTAL SOLID	CHLO PH A
			PTS/K	PTS/K	PERC	UNIT	UNIT	PTS/K	PTS/K	MG/L	MG/L	MN/L	MG/L	MG/L	MG/L	MG/L	MG/L	M/M3
67	1532	10	20.02	****	***	***	***	***	***	***	***	***	***	***	***	***	***	6.1
69	1415	0	16.03	15.51	97	51	7.5	8.58	4780	173	.01	.00	645	.18	185	38	22000	4.5
70	1140	0	11.25	10.43	97	62	7.3	5.76	3210	116	.01	.00	410	.41	115	38	14200	4.4
70	1415	0	12.78	12.09	99	23	7.6	6.68	3720	134	.01	.00	483	.46	140	26	16000	2.0
71	1230	0	13.21	12.41	98	32	7.4	6.86	3820	138	.02	.00	500	.44	135	21	17500	4.6
72	1440	0	20.09	19.07	94	9A	7.7	10.55	5860	211	.01	.00	875	.24	250	51	36000	7.0
75	1250	0	17.66	16.62	99	24	7.9	9.19	5120	184	.02	.00	640	.28	182	16	22000	7.5
76	1300	0	****	10.35	98	41	7.9	5.72	3190	115	.01	.00	400	.24	115	43	14500	3.9
76	1400	0	12.36	11.14	98	38	7.8	6.16	3430	123	.02	.00	430	.52	125	38	15500	5.3
76	1400	5	12.16	****	***	***	***	***	***	***	***	***	***	***	***	***	****	***
76	1400	10	13.09	****	***	***	***	***	***	***	***	***	***	***	***	***	****	4.7
79	1200	0	2.41	1.85	98	36	7.4	1.01	570	20	.02	.00	150	.58	50	27	2300	11.5
82	1245	0	5.62	****	***	***	***	***	***	***	***	***	***	***	***	***	****	9.4
82	1245	5	5.28	****	***	***	***	***	***	***	***	***	***	***	***	***	****	4.3
82	1300	10	7.62	****	***	***	***	***	***	***	***	***	***	***	***	***	****	6.5
83	1245	0	4.93	4.40	97	46	7.8	2.42	1360	49	.01	.00	213	.42	60	46	6500	12.1

1 SALINOMETER MEASUREMENT

2 TITRATION MEASUREMENT

TABLE 13
MISSISSIPPI SOUND IV
SURFACE DATA STATION LABORATORY MEASUREMENTS

STA NUM	TIME CDT	SAMP DPTH FT	SALIN #1 PTS/K	SALIN #2 PTS/K	LGHT TRAN PERC	TURB NEPH UNIT	PH UNIT	CL PTS/K	NA PTS/K	K MG/L	PO4 MG/L	NO3 MN/L	MG MG/L	FE MG/L	CA MG/L	SUSP SOLID MG/L	TOTAL SOLID MG/L	CHLU PH A M/M3
84	1320	0	3.71	3.51	99	18	7.2	1.93	1080	39	.02	.00	135	.42	69	21	4400	27.9
85	1310	0	5.06	4.56	97	56	7.3	2.51	1410	51	.01	.00	170	.58	70	36	6200	10.0
86	1315	0	7.73	6.85	99	21	7.5	3.78	2110	76	.01	.00	290	.52	85	23	10400	****
86	1315	5	8.31	****	****	****	****	****	****	****	****	****	****	****	****	****	2.0	
88	1305	0	29.79	29.00	98	30	7.9	16.05	8930	320	.01	.00	1240	.26	350	23	42500	2.9
89	1250	5	31.33	****	****	****	****	****	****	****	****	****	****	****	****	****	.9	
89	1250	10	32.01	****	****	****	****	****	****	****	****	****	****	****	****	****	.9	
89	1250	15	32.68	****	****	****	****	****	****	****	****	****	****	****	****	****	.9	
90	1427	0	22.11	21.31	97	51	7.6	11.79	6560	236	.02	.00	800	.26	230	44	29500	4.3
90	1520	0	22.20	21.38	97	59	7.6	11.83	6590	238	.02	.00	805	.27	240	49	29400	5.3
91	1513	0	17.91	17.01	98	29	7.0	9.41	5240	188	.01	.00	760	.18	220	37	24500	10.4
92	1513	0	24.09	23.20	99	19	8.2	12.84	7150	257	.02	.00	825	.42	235	19	31800	14.2
93	1508	0	.43	.21	84	167	7.6	.10	65	2	.05	.01	11	2.11	48	129	260	2.7
94	1504	0	16.78	16.15	99	23	8.1	8.93	4970	180	.02	****	740	.32	210	22	24500	14.6
95	1342	0	****	13.37	99	23	7.4	7.39	4120	148	.01	.00	533	.32	150	16	17500	3.1
96	1550	0	1.57	1.18	82	205	7.6	.64	365	13	.08	.01	45	1.62	55	146	1600	5.1

1 SALINOMETER MEASUREMENT

2 TITRATION MEASUREMENT

TABLE 13
MISSISSIPPI SOUND IV
SURFACE DATA STATION LABORATORY MEASUREMENTS

STA NUM	TIME CDT	SAMP DPTH FT	SALIN •1 PTS/K	SALIN •2 PTS/K	LGHT TRAN PERC	TURB NEPH UNIT	PH UNIT	CL PTS/K	NA PTS/K	K MG/L	PO4 MG/L	N03 MN/L	MG MG/L	FE MG/L	CA MG/L	SUSP SOLID MG/L	TOTAL SOLID MG/L	CHLO PH A M/M3
97	1400	0	.76	•••••	••••	••••	•••••	•••••	•••••	••••	••••	••••	••••	••••	••••	••••	•••••	3.4
97	1444	0	.53	.21	86	180	7.5	.10	60	2	.05	.02	10	1.67	24	121	280	3.0
97	1515	0	•••••	.13	85	175	7.4	.06	50	2	.06	.04	10	1.85	26	127	260	3.0
98	1443	0	.42	.10	85	210	7.9	.04	40	1	.04	.06	11	1.95	21	104	310	3.2
98	1443	0	.96	.17	84	205	7.4	.08	55	3	.08	.03	11	1.98	25	131	290	4.2
98	1443	0	.69	.13	85	180	7.6	.06	50	3	.07	.05	10	2.01	50	137	245	3.0
100	1434	0	18.86	18.20	98	26	8.4	10.07	5610	202	.01	.00	815	.23	230	29	27000	42.7
101	1429	0	26.57	25.43	97	39	7.9	14.07	7830	283	.01	.00	960	.22	275	41	37500	5.4
102	1355	0	5.03	4.56	99	18	7.6	2.51	1410	51	.01	.00	295	.38	85	16	6000	7.9
103	1000	0	28.31	27.66	99	12	8.1	15.31	8520	306	.02	.00	1420	.17	390	22	41000	.9
104	1405	0	20.38	19.72	99	10	7.8	10.91	6080	218	.02	.00	760	.42	215	11	26800	2.8
105	1043	0	16.60	14.96	95	81	7.8	8.27	4610	166	.01	.00	575	.48	165	56	41000	4.4
106	945	0	11.62	11.05	98	36	7.2	6.11	3400	122	.01	.00	465	.48	130	21	15500	5.0
108	1300	0	25.09	24.00	99	16	7.8	13.28	7390	266	.01	.00	925	.36	267	10	33500	1.9
109	1010	0	25.15	23.44	98	20	7.8	12.97	7220	260	.01	.00	900	.44	270	14	32300	3.4
109	1010	5	25.45	•••••	••••	••••	•••••	•••••	••••	••••	••••	••••	••••	••••	••••	•••••	3.7	

1 SALINOMETER MEASUREMENT

2 TITRATION MEASUREMENT

TABLE 13
MISSISSIPPI SOUND IV
SURFACE DATA STATION LABORATORY MEASUREMENTS

STA NUM	TIME CDT	SAMP DPTH FT	SALIN #1 PTS/K	SALIN #2 PTS/K	LIGHT TRAN PERC	TURB NEPH UNIT	PH UNIT	CL PTS/K	NA PTS/K	K MG/L	PO4 MG/L	N03 MN/L	MG MG/L	FE MG/L	CA MG/L	SUSP SOLID MG/L	TOTAL SOLID MG/L	CHLO PH A M/M3
111	1003	0	21.78	21.38	98	32	8.0	11.83	6590	237	.02	.00	825	.42	235	28	29000	3.2
111	1115	0	****	****	***	***	***	****	****	***	***	***	***	***	***	****	****	3.7
113	1315	0	22.98	21.85	96	62	7.5	12.09	6730	242	.02	.00	975	.18	275	41	30000	4.3
114	1312	0	15.66	14.87	99	21	7.6	8.22	4580	165	.01	.00	570	.18	164	12	18700	9.3
115	1330	0	8.04	7.34	99	22	7.7	4.05	2260	81	.01	.00	328	.38	95	20	9500	5.0
115	1335	5	8.33	****	***	***	***	****	****	***	***	***	***	***	***	****	****	****
119	1115	0	8.10	****	***	***	***	****	****	***	***	***	***	***	***	****	****	****
118	1055	0	12.04	11.15	99	24	7.1	6.16	3430	123	.01	.00	450	.46	130	14	17200	4.2
119	1115	0	****	7.41	98	26	7.3	4.09	2280	82	.02	.00	300	.42	85	18	10300	****
120	1130	0	7.32	7.01	97	52	7.6	3.87	2160	78	.02	.00	310	.36	90	42	10500	5.0
121	1150	0	7.12	6.78	99	28	7.5	3.74	2090	75	.02	.00	260	.42	75	16	10000	5.0
122	1203	0	.50	.13	99	18	7.3	.06	50	2	.08	.06	55	2.63	38	19	220	2.4
123	1212	0	.78	.13	99	30	7.6	.06	45	3	.09	.01	5	2.44	35	20	160	10.3
124	1300	0	1.45	.73	98	36	7.4	.39	225	8	.03	.02	13	2.02	13	17	600	10.4
125	1310	0	.38	.21	98	23	7.5	.10	65	3	.07	.04	6	1.94	42	31	240	9.5
126	1345	0	3.04	3.04	98	30	7.1	1.67	940	34	.02	.00	130	.49	45	24	4200	****

1 SALINOMETER MEASUREMENT

2 TITRATION MEASUREMENT

TABLE 13
 MISSISSIPPI SOUND IV
 SURFACE DATA STATION LABORATORY MEASUREMENTS

STA NUM	TIME CDT	SAMP DPTH FT	SALIN *1 PTS/K	SALIN *2 PTS/K	LGHt TRAN	TURB NEPH	PH UNIT	CL PTS/K	NA PTS/K	K MG/L	P04 MG/L	N03 MN/L	MG MG/L	FE MG/L	CA MG/L	SUSP SOLID MG/L	TOTAL SOLID MG/L	CHLO PH A M/M3
127	1330	0	*****	.13	99	17	7.8	.06	45	2	.03	.08	4	2.32	14	18	100	7.5